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THE IMPORTANCE OF UNDERSTANDING INCOME AND PROFITS

H. G. KIMBALL

THE IMPORTANCE of understanding income and profits is readily apparent when we regard them as means to ends which men hold desireable. To most of us, income and profits represent the means of obtaining goods and services which we require to live. As such they constitute ideas which influence our efforts to satisfy our need for such goods and services and determine largely whether those efforts will be successful or whether they will fail.

Our organization of these efforts, that is, our system of political-economic relationships, is the subject of much current controversy, and the principal political-economic struggles of the day reflect movements to retain and make secure existing political-economic relationships (Fascism), to modify them to make them workable and to correct social injustices (Liberalism, New Deals), or to destroy them and institute new ones (Communism).

In all of these movements the problems of income and profits are of paramount importance. Statements are made and questions asked everywhere concerning the nature of income and profits and their interrelationships, the amounts and kinds of goods and services actually produced and the amounts and kinds which should and could be produced, the causes of increases and decreases in production and profits, and the manner and ratio of the distribution of production among men.

It appears that in the United States there are yet no good statistical analyses or measures of income with which with confidence to answer these questions. Typical testimony to this fact may be found in Chapter V. of *Recent Social Trends*, a study which, it will be recalled, President Herbert Hoover in his Foreword said "should serve to help all of us to see where social stresses are occurring and where major efforts should be undertaken to deal with them constructively," but which will not if it is not based on accurate, significant, and comprehensive statistics. The authors of Chapter V, Edwin F. Gay, Harvard University, and Leo Wolman, Columbia University, said:

> The measurement of national income even in ordinary times is a formidable task. The conception of national income is not a simple one, since the statistical measure so designated is a composite of various types of income not all susceptible of equally clear and acceptable definition. The measurement, therefore, of more or less indefinable elements leaves considerable latitude for broad estimate and difference of opinion. In periods of appreciable price changes these problems of measuring real income are multiplied many times by reason of the unavoidable difficulty encountered in constructing satisfactory index numbers of the purchasing power of the dollar. Under the circumstances it is essential to employ elaborate estimates of national income with extreme caution and to compare them with indexes of the physical output of industry, of the volume of employment and the like, before coming to final conclusions as to the trend of conditions.

Undeniably two of the principal reasons that statistics concerning income are a makeshift "composite of various types of income not all susceptible of equally clear and acceptable definition" are that statisticians have not used the material obtainable from

accounts either fully or correctly, and that accountants don't understand income. Dr. John B. Canning of the Department of Economics, Stanford University, pointed this out clearly in *The Economics of Accountancy*,[1] a discussion of the economic significance of certain of the statistical concepts and procedures employed by professional public accountants. Concerning the use of accounts he says:

The economist, among others, is often interested in some certain problem that manifests itself in many enterprises, or has its roots in enterprise in general. He may look to the accountant's income statements for a part of his information. But unless he is aware that such statements may not disclose all, not present in the most pertinent manner, information important to the particular inquiry in process, he is likely to draw wrong inferences from what he finds.[2]

[The accountant obtains all the necessary information.] It will be found in his working papers and audit memoranda. Some of it will be commented upon in his report. But he does not put it all into the income statement in plainly labeled items; to do so would, in most cases, inevitably *prevent his conveying effectively* some other information that seems to him more important to communicate. The really fruitful mine of statistical information is in the accountant's working papers and the books after the audit is concluded, rather than in the general-purpose reports. To adopt uncritically data drawn from general-purpose reports of the accountant in the study of any financial problem of a public character is dangerous***.

What has just been said is not intended to turn economists and other students of public problems away from the accountant's income reports. Much useful and reliable information can be got from them; and much that is significant can be inferred from them. But one who wants to know all that accountants have learned and recorded about any particular problem will never learn it from their ordinary reports. On the other hand, there is an extraordinarily rich mine of information about income and about the problems in which aspects of income are significant, now almost wholly unworked. It is to be hoped that some day qualified economists will gain access to the files of working papers in accountants' offices.

Nevertheless Canning "believes that the accountant's procedure in dealing with income is, in some respects, the least satisfactory part of his procedure."[3] It is unsatisfactory because of the lack of a clear notion of income. In this connection he quotes Irving Fisher as follows:

I believe that the concept of income is, without exception, the most vital central concept in economic science and that on fully grasping its nature and interrelations with other concepts largely depends the full fruition both of economic theory and of its application to taxation and statistics.

According to Canning,[4] certain aspects of Fisher's concept of income, which Canning chooses as representative of economists' views may be summarized as follows:[5]

Income, in its most general sense, consists of services, that is, of desired events of whatsoever nature. All services proceed, ultimately, from existing material objects (including, of course, human beings); but under no circumstances are material things income; these belong to a wholly distinct though related category. The economist is not professionally interested in services that may be had at will by all who desire them; services free to all in amounts adequate for all who desire them, are, therefore, excluded from the concept; all scarce services are included in income.

Costs consists of disservices, that is, of the amount of work necessary to produce from a material object the service which it is capable of yielding.[6] Services or disservices can be measured in terms of work done or occasioned or wealth (the appropriated material objects that are the necessary means to procuring services, or that are the agents or vehicles for conveying services)

[1] The Ronald Press Company, New York, 1929.

[2] I have paraphrased the first paragraph of Dr. Canning's criticism because it does not, as he wrote it, emphasise the political-economic need for better statistics as I wish to do here. The criticism appears at pages 140 to 142 of his book.

[3] Ibid. p. 90.

[4] Ibid. p. 146.

[5] Ibid. Chapter VIII, pp. 143–178.

[6] Canning does not define cost explicitly, but I believe that the definition given faithfully represents his idea.

that has come in or gone out. These are measurable, in some degree at least, in terms of a common unit, money value.

From a social point of view neither what we call the productive processes nor any transfers of interests in things or in future services can result directly in any final income (that is, only eating, drinking, wearing, and enjoying—the maintenance of life in human beings—constitutes final income).

With respect to human beings all objective income is ultimately resolved into the final uses of material objects just as all costs or disservices are ultimately resolved into labor sacrifice costs.

It is obvious to anyone examining accounting reports or accounting literature that accountants do not concern themselves, professionally, with "services" and "final uses" or "disservices" and "labor sacrifice costs." Moreover, since their work is confined almost exclusively to the activities of enterprises engaged in the productive processes or in the transfer of interests in things or in future services, activities from which, as Canning says, final income cannot directly result, their reports cannot in most cases be expected to present information concerning such matters, and Canning does not expect them to. On the other hand, speculating upon the nature of the report that an accountant would prepare if asked to ascertain the amount, in money value, of the *final objective income* of an individual, Canning says[7] that "an accountant would be likely to set up—what he would call that person's —cost of living," giving effect there in to the use of items received as gifts. But the fact that accountants, so far as I know, never prepare or even consider preparing such a statement is indicative of their failure, and, for that matter, the failure of the persons for whom they work, to grasp, so far, the nature of the concept of income and to apply it where they best could.

What do accountants mean by income and profit, terms which they use interchangeably and synonymously? What do they measure by the computations that are summarized in their income and profit and loss accounts? It is useless to recite definitions from accounting literature in answer to these questions because, as the Accountant's Handbook[8] says concerning a definition from Montgomery which they present as typical, "such definitions are intended to be nothing more than general technical guides to the accountant, as they do not definitely settle the question of the nature of * * * income * * *." It appears to me that, so far as the sums described as income and profit in the financial statements of corporations organized for profit have a qualitative nature common to all, they are simply and only measures of the sums which may properly, that is, legally, be distributed as dividends to the stockholders of the corporations. The sums so described in the income accounts of partnerships, trust estates, individuals, and non-profit corporations, etc. are ordinarily computed in the same general manner as those in the accounts of profit-making corporations, but only in the cases of partnerships, trust estates etc., do they have the same general nature, only in those cases do they represent sums distributable to individuals to whom they would constitute money income; in the case of the accounts of individuals, non-profit corporations, etc. such sums would seem better described as savings or increases in wealth.[9]

When paid, dividends, partnership earnings, trust estate income, etc. are, to the recipients, money income. The consumption goods and services purchased with the money are real income, "final objective income." The "desired events" resulting from the use of the products and services constitute the users' income in its basic and "most general sense." From this point of view, dis-

[7] Op. cit. p. 163.

[8] Pp. 1075–1076. Incidentally the Handbook's discussion is exceptional among accounting books; but even it does not answer the question of what the accountant means by income if he doesn't mean what the economist does, which it shows to be the case.

[9] The Committee on Terminology of the American Institute of Accountants defines the term "income" as it is used in accounting as an increase in wealth. (*Accounting Terminology*, p. 68.) The committee appears to have no clearer conception of income than accountants generally. The confusion on the point seems to be due to a large degree to the domination over our thinking of the point of view of the corporation, an "artificial person," and the resultant failure to analyze concepts and problems from the point of view of the forgotten natural man.

regarding the reason or consideration for the payment, such payments are identical in nature with payments of salaries and wages, rent and interest; they are each, to the person receiving them, money or, in the case of payments in kind, real income.

In the accounts of profit-making corporations, partnerships, trust estates, etc., the amounts designated by accountants as profit or income may in most cases correspond in a rough fashion to what economists would term profit, and as a practical matter it seems acceptable and harmless to consider them as such. What is harmful is the habit of thinking of profit as income and of wages, rent and interest as costs; it is harmful to make profit the criterion of the success of political-economic policies without considering whether they have resulted in the largest possible, necessary output of goods and services distributed in a manner that has resulted in the greatest possible general benefit. This criticism, that the test of profit rather than income is "the pivot on which by far the greater part of the economic system turns" (it emphasises the failure to grasp the *interrelations* of the concept of income with other concepts, as much as it does the failure to grasp the nature of income) is developed by G. D. H. Cole, reader in Economics in the University of Oxford and member of the Economic Advisory Council to the British Government, in *A Guide Through World Chaos*[10] from which the following is quoted:

> Profit is the pivot on which, under our present industrial system, the development of industry necessarily turns, and the possibility of profit depends on the existence of an adequate market to absorb the goods which industry is capable of producing. The questions of production and distribution are thus bound up together in this problem of the sufficiency of business profits.
>
> The expectation of profit is indeed the incentive on which the modern industrial system chiefly relies in order to get goods produced. The money product of industry—that is, the price at which goods are sold—is broken up into certain shares which are allotted to the various factors of production. The price at which goods are sold reappears in the wages, the interest, the rent and the profits paid out in the course of production. But under our present industrial system the sums paid out as profits stand in a very different relation from all the others to the productive process. Those who are in control of production necessarily regard the wages, the interest and the rents which they have to pay as costs of production which it is desirable to keep down to the lowest possible point; and the objest of the productive process—the necessary object under present conditions—is to sell goods at a sufficient price to leave a margin of profit after meeting these costs. Profit thus appears not merely as *a* good but *the* good arising out of production, and is thus contrasted sharply with wages, interest and rent.
>
> If, however, we consider rent, wages, interest and profits not as elements in the productive process, but as incomes distributed to the various members of the community, no such contrast exists, for obviously all incomes are good, and it is good that the total income distributed to the community should be as large as possible. There may of course be faults in its distribution. Some people may get too much and others too little, and a faulty distribution of the income may result in a diminution of the total amount of satisfaction or human happiness that the economic system affords. For it is a commonplace among economists that money is of "diminishing utility" as a man gets more of it, and that accordingly the more equally a given amount of income can be distributed the more satisfaction it is likely to afford. But no fault in distribution can make income in itself anything but good; and it is the paradox of our economic system that it appears to treat as a good—as the end and object of the productive process—not all the forms of income which are generated in the course of production, but profits alone.[11]

It is indispensable to seize firmly . . . this pivotal position of profit in the modern economic system; for until this is understood the world's failure to make adequate use of the productive resources at its command seems merely absurd. It is inconceivable that it should really be of advantage to the world to leave a substantial part of its productive power unemployed; but it is quite intelligible that the owners of a particular mine or factory should be unable to make use of it so as to realize a profit, and that unemployment of wage-workers should result from this inability.

Under the system known as private enterprise profit is the only possible means of getting goods and services produced; for all other forms of in-

[10] Alfred A. Knopf, New York 1932.

[11] Op. cit., pp. 20 and 21.

come, though they are equally the means of living to their recipients, make their appearance in this system as costs and therefore as deterrents and not incentives to production. It is true that monetary incentives may be offered to wage and salary-earners in order to induce them to increase their output; but whether their doing this will result in increased production or a diminished volume of employment depends on the prospects of profits as estimated by their employers. Profit remains the pivot on which the entire system turns.[12]

Cole goes on[13] after discussing the popular conception of the capitalist producer's incentive to lower costs in the hope of a higher profit, to distinguish between reducing "real costs," the amount of labor and material used in making a given quantity of goods, a reducing the incomes distributed in the course of production. He concludes that competitive wage cuts for the purpose of reducing costs ("all costs are ultimately resolved into labor-costs"—Canning) "are disastrous to world prosperity, and that a system which can find no means of preventing them is in serious danger of collapse."

Cole does not explicitly mention accountants or accounting in his discussion, but John Maynard Keynes, another eminent British Economist says:

There is one more explanation, I think, of the re-orientation of our minds. The nineteenth century carried to extravagant lengths the criterion of what one can call for short "the financial results," as a test of the advisability of any course of action sponsored by private of by collective action. The whole conduct of life was made into a sort of parody of an accountant's nightmare. Instead of using their vastly increased material and technical resources to build a wonder city, the men of the nineteenth century built slums; and they thought it right and advisable to build slums because slums, on the test of private enterprise, "paid," whereas the wonder city would, they thought, have been an act of foolish extravagance, which would, in the imbecile idiom of the financial fashion, have "mortgaged the future"—though how the construction to-day of great and glorious works can impoverish the future, no man can see until his mind is beset by false analogies from an irrelevant accountancy. Even to-day I spend my time—half vainly, but also, I must admit, half successfully—in trying to persuade my countrymen that the nation as a whole will assuredly be richer if unemployed men and machines are used to build much needed houses than if they are supported in idleness. For the minds of this generation are still so beclouded by bogus calculations that they distrust conclusions which should be obvious, out of a reliance on a system of financial accounting which casts doubt on whether such an operation will "pay." We have to remain poor because it does not "pay" to be rich. We have to live in hovels, not because we cannot build palaces but because we cannot "afford" them.[14]

The same rule of self-destructive financial calculation governs every walk of life. . . .

But once we allow ourselves to be disobedient to the test of an accountant's profit, we have begun to change our civilization. . . . [15]

It is important to understand income and profit!

[12] Op. cit., p. 129.

[13] Op. cit., pp. 140 to 142.

[14] If it is not already clear, I should point out that an extensive program of public works construction, especially housing, is one of Keynes' principal suggestions for recovery.

[15] "National Self-sufficiency" *The Yale Review*, Summer 1933, pp. 755–769.

PROPERTY RIGHTS OF STOCKHOLDERS UNDER THE 1933 ILLINOIS BUSINESS CORPORATION ACT

WALTER F. FRESE

BERLE AND Means in their book, *The Modern Corporation and Private Property* discuss the extent to which the board of directors of a corporation may exercise control over the property rights of stockholders. It is the purpose of this article to make a similar but more detailed study with reference to the Illinois Business Corporation Act.[1] Throughout this article the rights of the stockholders are treated as contract rights. The expression, "contract rights" needs some explanation. It is, of course, true that the "contract rights" of stockholders are subject to the provisions in the articles of incorporation and the general incorporation act. So, theoretically, it would seem that when directors exercise powers which they can exercise under the provisions of the articles and the act, they are complying with the terms of the contract under which stockholders contribute their capital. As a practical matter, however, stockholders do not and are not expected to read thoroughly and understandingly the articles of incorporation and the business corporation act. It would seem reasonable that stockholders intend to share in the assets and earnings of the corporation in the manner expressed at the time they invested their capital; further that they would continue in the same relative position with respect to other contributors of capital.

However, under the Business Corporation Act of Illinois it is possible for the directors to have wide powers to alter, sometimes drastically, the manner in which stockholders participate in the assets and earnings of the corporation which they own, without the direct consent of the stockholders themselves. From a practical point of view, and laying aside the legal fiction that the contract between the corporation and the stockholders in subject to the provision in the Articles and the Business Corporation Act under which the corporation is organized, it seems that it is possible for directors to alter the original rights of the stockholders.

In the first place it may be noted that the Statement of the powers of the corporation may be made so broad and inclusive as to allow the directors to enter almost any line of business activity they see fit. The general understanding of the stockholder is undoubtedly that the corporation is to engage in a certain type of activity. By giving the directors wide powers to engage in different types of business activity they are giving them the power to subject the stockholders investment to risks to which it might never have been intended when the original contract was entered into.

It is possible under the Illinois Act to remove the stockholder's pre-emptive right to subscribe to additional stock in the corporation when it is issued. This is accomplished by making explicit provision to that effect in the articles of incorporation.[2] When this fact is coupled with the wide latitude of powers allowed directors in fixing the consideration to be received for stock issued and in valuing property received as consideration for shares, the powers of directors to alter the participating rights of stockholders in the property of the corporation is almost unlimited. The articles need not give the directors the power to fix the consideration to be received for shares or to value the property exchanged for shares. Those powers are given by the act,[3] which, while it places certain limits on the consideration to be received for shares, nevertheless gives the directors sweeping powers to alter the partici-

[1] Since the preparation of this article, the Act has been amended, but it is not believed that the amendments materially affect the validity of the propositions herein discussed.

[2] Sec. 24.

[3] Sec. 17 and 18.

pation of shareholders in the assets of the corporation. Thus Section 17 provides that "shares having par value may be issued for such consideration, not less than par value thereof, as shall be fixed from time to time by the board of directors." The directors are here limited in their power to fix the consideration for shares in that they cannot issue additional stock for less than its par value. However, as a practical matter this limitation is not effective in controlling the power of the directors in altering the rights of the stockholders in the property of the corporation after the latter has been in existence for some time. A share of stock entitles the holder thereof to a proportionate share of the assets whether the latter be there as a result of the shareholder's original investment or as a result of accumulated earnings which have not been distributed. Each share of the stock of the same class is entitled to the same proportionate share in the assets as any other share in the same class.[4] It follows that if a certain class of stock has a par value of $100 and accumulated earnings have resulted in bringing the asset value behind each share to $150, to sell additional stock to new stockholders of the same class for any price below $150 results in giving the purchaser a right to a part of the assets which formerly belonged to the old stockholders. The latter could protect themselves if their pre-emptive right to subscribe to additional stock had not been taken away by the articles of incorporation. In the case of stock without par value the act provides that it may be issued "for such consideration as may be fixed from time to time by the board of directors unless the articles of incorporation reserve to the shareholders the right to fix the consideration." All that is necessary then to give the directors complete power to alter the right of participation in assets which belong to the stockholders as a result of contributions or accumulated earnings is to say nothing in the articles which would reserve to the stockholders the right to fix the consideration received. In the case of stock without par value there is not even the limitation of "par" on the directors' power to sell the stock at any price and to alter the participation of existing stockholders accordingly. While in the first case mentioned (where the asset value supporting each share of stock was $150 and par was $100) the directors could not sell the stock for less than $100. However if the stock had no par value, even that limitation is removed. In either case, however, selling additional stock below $150 results in transferring rights to assets belonging to the old stockholders to the new purchasers. The possibilities in this connection are merely greater in the case of stock without par value than in the case of stock with a par value. Also, in the case of stock without par value such shifting of rights can take place whether or not the corporation has accumulated a surplus through operations. It should be pointed out, however, that courts have set aside such sales where there is fraud. But, fraud is difficult to prove. All that the law requires is that the directors prove good faith and show that they acted in what they thought was the best interests of the corporation in selling the additional stock at a price lower than the existing pro-rata value. In any event, the injured stockholder is put to the expense of a law suit to protect his rights, the eventual outcome of which is doubtful.

The Business Corporation Act provides that "the consideration for the issuance of shares may be paid, in whole or in part, in money, in other property, tangible or intangible, or in labor or services actually performed for the corporation."[5] In the same section it is also provided that "in the absence of actual fraud in the transaction, the judgment of the board of directors or the shareholders, as the case may be, as to the value of the consideration received for shares shall be conclusive." All that is necessary to give the directors the power of valuation is for the articles to remain silent as to any provision reserving such power of valuation to the stockholders. This power of valuation is closely linked with the power of fixing the consideration received for shares with respect to its effect on the control possessed by

[4] Unless the stock has been issued in series. This will be discussed later.

[5] Sec. 18.

directors over the property right of stockholders. It enhances the powers over stockholders' participation discussed in the preceding paragraph. One example will be sufficient to indicate the possibilities.

If stock is issued in exchange for property appraised by the directors at $10,000 the true value of which is $5,000, the result is obviously to issue the stock for an actual consideration of $5,000. This results in taking away participation in assets from the old stockholders who have paid in full value for their stock in the manner previously discussed. This power of valuation enables directors to conceal the sale of stock at different prices with the consequent shifting of participation in assets previously noted. Of course, if fraud can be proved the sale might be set aside but it might be again pointed out that fraud is hard to prove. Many jurisdictions merely require that the directors assert good faith in their valuation while others indicate that the issuance of stock may be set aside if the "true value" of the property is shown to be lower than the appraised value of the directors. But even in the latter case the judgment of the directors is given considerable weight.

The preceding discussion has been concerned with the powers over the property rights of stockholders which the directors might exert by shifting the participation in assets from one group of stockholders holding a certain class of stock to others holding the same class of shares. Of course, the particular class of stock makes no difference in this connection. All that is required in the articles to allow the directors to exert these powers is to provide therein for the authorization of the particular class of stock and to provide specifically for the removal of the stockholder's pre-emptive right. As the number of classes of shares authorized in the Articles of Incorporation increase, the powers which directors exert over the property rights of stockholders increase also. Then it becomes possible not only to shift the rights to corporate assets as between different groups of stockholders of the same class but also between different classes of stockholders.

Section 14 (b) of the Act allows the issuance of noncumulative preferred stock. It is well to remember that on no stock is there an absolute obligation on the part of the corporation to pay dividends. Dividends become a liability only after proper declaration on the part of the board of directors. Thus if the articles provide for the issuance of 7 per cent noncumulative, nonparticipating preferred stock such stock has a right to receive a 7 per cent dividend in any year before any dividend can be paid to junior stockholders. However, if for some reason the directors see fit not to declare a dividend at all in any particular year, the preferred stockholders lose their right to such dividend. It would thus be possible to pass dividends for a number of years even though profits were being earned regularly and thus build up a substantial surplus. Then when a dividend is declared, the preferred stock would receive its 7 per cent dividend before any would go to the common stockholders, but the latter would receive all the rest of the surplus which includes the previous unpaid dividends on the preferred stock. While this seems to be the result the decided cases have not conclusively settled this point. Some cases have held that in the case of noncumulative preferred stock, earnings withheld in any year must ultimately be applied to the holders of preferred stock.[6] However, a quite recent case[7] which apparently takes the prevailing view holds that although the preferred stock had not received dividends for previous years in which they were earned, common dividends could be paid in any year in which the preferred stock had been paid one year's dividend. While this decision did not settle the question as to whether the surplus arising as a result of nonpayment of these earned dividends belonged to the preferred stock or the common stock, the prevailing business view seems to be that if not declared as a dividend the surplus is lost to the preferred stockholders.[8] It should also be pointed out in this connection that direc-

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[6] Berle and Means, *The Modern Corporation and Private Property*, p. 191.

[7] Wabash, R. R. v. Barclay, 280 U. S. 197.

[8] Berle and Means, op. cit., p. 192.

tors have control over the accounting methods followed by a corporation. It is possible by various methods to obscure real profits in any particular period and to have them shown as being earned in a subsequent period. This fact, of course, makes it possible for the directors to show that the corporation has earned no profits in a particular year and hence their failure to declare dividends is quite justifiable. This understatement of profits could subsequently be offset by a corresponding overstatement. The result would be that in the latter period if a dividend were declared the preferred stock would receive its 7 per cent, while the amount going to the common stock (either then or later) would be augmented by profits earned in a previous period but wrongfully shown as earned in the present period. The question raised above, as to whether undeclared earned dividends still belong to preferred stock, would probably not be raised if this procedure were followed. While such a procedure is fraudulent it would be difficult to prove it such since accounting procedure is subject to a certain degree of elasticity in judgment. However, it is hoped that the recent trend in requiring that a corporation's annual statements be certified by independent public accountants will do much to minimize this practice.

Section 14(e) provides that the articles may authorize the issuance of shares which are "convertible into shares of any other class, or into shares of any series of the same or any other class, *provided* that shares without par value shall not be converted into shares with par value unless that part of the stated capital of the corporation represented by such shares without par value is, at the time of conversion, at least equal to the aggregate par value of the shares into which the shares without par value are to be converted." While the option of conversion is usually left with the stockholder there seems to be nothing in the act which would prevent leaving the option with the corporation, i.e., with the directors, if explicit provision to that effect is made in the articles. Such a provision makes it possible for the directors to shift the property rights of the stockholders as they please. Thus a class of stockholders who have preferential rights as to the assets and earnings could at the discretion of the directors (assuming, of course that the provision had been made in the articles) have their claim against the assets replaced by a claim carrying with it entirely different, possibly far inferior, rights against the earnings. The possibilities in this connection seem almost unlimited. In the case of par-value stock convertible into other par-value stock there is not even the limitation of par for par. Nor is the limitation expressed in the act, that the stated capital of shares without par value has to be equal to the par value of shares into which the no-par shares are to be converted, very effective. At the time of the issuance of the shares without par value the directors may apportion any part of the consideration received for such shares without par value to paid-in surplus.[9] Thus it seems possible that by the conversion process holders of stock without par value might lose a considerable portion of their original investment.

One of the largest grants of power over the property rights of the stockholders is made possible by the provision of Section 15 of the act which permits the issuance of shares of stock of any class in series. It is possible under this section to grant to the directors authority to divide any or all classes of preferred or special classes of stock into series which permit variations to be made as between the different series in the same class with respect to the following relative rights and preferences:

(a) The rate of dividend.

(b) The price at and the terms and conditions on which shares may be redeemed.

(c) The amount payable upon shares in the event of involuntary liquidation.

(d) The amount payable upon shares in the event of voluntary liquidation.

(e) Sinking-fund provisions for the redemption or purchase of shares.

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[9] Sec. 19. This is limited in the case of no par preferred stock in the event that such stock is sold for more than its preference value. In that case only the excess over redemption value can be allocated to paid in surplus.

(f) The terms and conditions on which shares may be converted if the shares of any series are issued with the privilege of conversion.

All that is necessary in order to grant to the directors absolute authority to establish series with the resulting variations in rights and preferences as above noted is to make no provision in the articles with respect to establishing series other than the one granting such authority to the board of directors, and to place no limitations in the articles on the authority thus granted to the board of directors. The only limitation placed on the board of directors in this connection will then be the one placed on them by the Act itself—that they shall not create a sinking fund "in respect of any series unless provision for a sinking fund at least as beneficial to all issued and outstanding shares of the same class shall either then exist or be at the same time created." They are, of course, limited to the specific variations in rights and preferences above indicated. However, the power to make these variations as between series may have pronounced effects on the ability of the directors to alter the existing property rights of stockholders and to alter the manner in which they share in the earnings. It is proposed to consider briefly each of the possible variations as between series of the same class of stock with the purpose of indicating the full significance of each.

(a) The rate of dividend.

The authority to alter the rate of dividend may alter drastically the existing rights of stockholders. Suppose there is authorization for an issue of preferred stock and unqualified power is given to the directors to establish series in the manner discussed above. Let it be assumed that the first series carries a preferred cumulative dividend of 6%, and that the next series issued carries with it a cumulative dividend, equally preferred with the first series, of 8%. Suppose, further, that the new capital brought into the business earns 7% or less. The result is to take away from existing stockholders earnings which would have gone to them and divert them to the holders of the new series of 8% preferred stock. The degree of security of the holders of the series carrying with it a 6% dividend is lessened because in effect a preferential rate of return of 2% is placed ahead of their preferential dividend right. The rights of junior stockholders is lessened because, as above noted, if the rate of return is not earned on the new capital, the preferred dividend will of necessity have to be paid from earnings which would otherwise have gone to holders of junior shares.

(b) The price at, and the terms and conditions on which shares may be redeemed.

(c) The amount payable upon shares in event of involuntary liquidation.

(d) The amount payable upon shares in event of voluntary liquidation.

The power to establish variations in accordance with (b), (c), and (d) listed above has the effect of taking away from old stockholders their rights to corporate assets and giving those rights to new purchasers of stock. Suppose, for example, that the first series of preferred stock is sold for $100 with a redemption price or liquidation value, involuntary or voluntary, of $105. Suppose the next series is also sold at $100 with a redemption or liquidation value set at $115. Since each series of the same class had an equal preferential right, one to $105 and the other to $115, the result is to reduce the security behind the first series and to take away from junior stockholders asset value in which they previously had an equity. Of course, by fixing a redemption price different from the liquidation value the extent to which property rights can be shifted is varied depending on whether the stock is redeemed or whether the corporation dissolves either voluntarily or involuntarily.

The possibilities of shifting asset rights by the board of directors is further enhanced when it is considered that the preferred stock as a class might well be without a par value which would give the directors wide latitude in fixing the price at which shares of each series would be sold. Thus, if in the above example the second series were sold for $80 (instead of $100) with the redemption value at $115, the security behind the shares of the first series would be reduced still further

and the rights to assets taken away from junior stockholders would even be greater.[10]

It may be pointed out that the power to vary "The price at and the terms and conditions on which shares might be redeemed" makes it possible for directors to enable the new stockholders to whom property rights have been shifted in the manner above indicated to realize on such shift in property rights at any time they see fit. Thus if the shift in property rights takes place in the manner indicated in the preceding paragraphs it is merely a shift in the right to property which still remains in the possession of the corporation. However, if the terms of redemption are such that the second series can be redeemed at such times as the directors see fit, by redeeming the stock the directors are really paying out the corporate assets to the new-series stockholders which formerly belonged to the old-series stockholders. It is thus unnecessary to wait until dissolution for stockholders to realize on a shift in property rights from other stockholders to them. It can be done at the discretion of the directors if the terms of redemption which they fix when establishing the series so provide. The whole matter of power over property rights which can be exercised by directors to reacquire or redeem stock will be discussed later.

It seems questionable whether or not in fixing "the price at and the terms and conditions on which shares may be redeemed or the amount payable upon voluntary or involuntary liquidation" the directors can, when establishing a new series, make the particular shares in that series preferred as to assets over prior series or over a senior issue of preferred stock. While it seems to the writer that this could not be done it is admittedly an open question. If it can be done the greatly increased power of directors to shift property rights is apparent.

(e) Sinking-fund provisions for the redemption or purchase of shares.

In this connection the Act places upon the directors the limitation that they "shall not create a sinking fund with respect to any particular series unless provision for a sinking fund at least as beneficial to all issued and outstanding shares of the same class shall either then exist or be at the time created." While this limitation prevents favoring one series of a class over another series of the same class in this respect it does not limit favoring a whole class of stock over other classes of stock outstanding prior to the issuance of the series with the sinking-fund provision. If the shares of prior series of the same class of stock had no sinking-fund provision when the new series is issued *with* a sinking-fund provision a sinking fund must be set up for the whole class at that time. This operates to facilitate the actual distribution of assets, the rights to which may have been taken away from other stockholders by a variation in the redemption price as previously noted. If there is a considerable margin between issue price and redemption price in the first series which originally had no sinking-fund provision, the effect is to facilitate distribution to shares of that series assets which have been contributed—either by actual contribution or accumulated earnings—by other shareholders. At any rate the holders of the shares of the first series are placed in a more favorable position relative to other classes of stock with respect to the security behind their stock than they previously had. Conversely, other shareholders are placed in a relatively less favorable position. It seems, then, that this power to establish a series with a sinking-fund provision makes it possible to increase the security relative to other stock of a prior series of the same class and to facilitate the distribution of assets which have in effect been taken away from other stockholders (through variation in redemption price) to the holders of the shares of the new series. By prescribing that the sinking fund applies specifically to the particular class of stock it is possible effectually to remove a preference as to assets which formerly belonged to a senior issue of preferred stock.

(f) The terms and conditions on which

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[10] It is assumed here that preferred stock without par value can be sold for less than its redemption value. This seems to be the reasonable interpretation of the act. However, the point will be considered further in a subsequent paragraph.

shares may be converted, if the shares are issued with the privilege of conversion.

By establishing in any particular series liberal rights of conversion into other securities the holders of other classes of securities are subject to the potential danger of having their interest in the assets and earnings diluted, which danger was not present at the time they bought their stock. The series of stock with the conversion privilege will probably not be converted unless the stock into which it is converted has a more favorable claim to assets and earnings. Thus, common stockholders of a certain class of stock may, as a result of the failure of directors to pay dividends, have earnings which rightfully belong to them, accumulating in the hands of the corporation. By exercising the option of conversion other shareholders may take away the rights to these earnings. Similarly, by making the particular series convertible into preferred stock of a higher rank the holders of the latter class of stock may have their equity in the assets diluted. While the directors already have the power to dilute the particular stockholder's interest in this manner—by selling additional authorized stock at a price lower than the value of the pro rata interest in assets represented by such stock—a new possibility is introduced by this medium.

In summing up the effect of the power which can be given to directors to divide a given class of stock into series it might be said that the directors can do almost anything they wish in varying the rights of existing stockholders with respect to dividend and asset participation and preference.

Section 6 gives the corporation power to acquire its own shares, the corporation exercising this power along with other powers through its board of directors. While the Illinois Act places certain limitations on this power to acquire the corporation's own shares, the resulting control which directors may exercise over property rights of stockholders is still far-reaching.

Section 6 provides that "A corporation shall have power to purchase, take, receive, or otherwise acquire, hold, own, pledge, transfer, or otherwise dispose of, its own shares." Then this section goes on to say that the corporation cannot purchase its own shares "if its net assets are less or would, by the purchase of the stock, be reduced to an amount lower than the stated capital, its paid in surplus, surplus arising from unrealized appreciation in value or revaluation of its assets on any surplus arising from surrender to the corporation of any of its shares." Briefly, a corporation in order to be able to purchase its own stock must have an earned surplus. However, it should be remembered that an earned surplus represents assets which belong to stockholders. Therefore to the extent that a corporation through its directors buys up its own stock at a price in excess of the value of the pro rata interest in the assets of that particular stock, it is in effect taking a part of the corporate assets which belong to remaining stockholders and paying them out to the stockholders whose shares are being purchased. There seems to be nothing in the act which would prevent the directors' buying stock back at any price they see fit. It seems that this authority would not even have to be granted them by specific provision in the articles of incorporation.

The power given to directors over property rights through their power to buy up the corporation's own stock enables them to shift participation in assets both between groups of stockholders of the same class and between stockholders of different classes. Two illustrations will be given to indicate the possibilities in this respect. Suppose a corporation has authorized but one class of stock of a total par value of $100,000 all of which is outstanding. Assume, further, that there is an earned surplus of $50,000. Assuming that the assets are correctly valued, each share has a pro rata equity in the assets of $150 (par value of $100 a share). In other words each share has an equity in assets of $100 for the original contribution and $50 for the undistributed earnings. In this case the directors cannot pay out more than $50,000 for stock, but to the extent that they pay more than $150 per share they are taking away assets which belong to remaining stockholders and distributing them to

the stockholders whose shares they are purchasing. Even if they buy back the stock at book value—$150 per share—the remaining stockholders are placed in a position where they cannot realize on their claim of $50 a share. For to the extent that the directors have used assets to buy up stock, the amount of surplus available for dividend distribution is reduced. Dividends cannot be paid if such payment would reduce the net assets below the stated capital. Thus if the directors paid out $30,000 for stock the surplus available for dividends would then be $20,000. However, in the last illustration (where the stock was purchased at $150 a share—its pro rata value) there was no shifting of asset participation rights. There was merely a change in the nature of the stockholders claim against the assets. His claim of $50 a share for assets which could, at the discretion of the directors, have been distributed became a claim of $20 which could then be distributed and a claim of $30 which legally could not be distributed.

To illustrate the manner in which there may be a shifting in rights to assets as between classes of shareholders, assume that in addition to the one class of common stock in the preceding illustration there is also authorized and outstanding an issue of 7%, cumulative, non-participating, preferred stock of $100,000 on which all past dividends have been paid. Each stockholder thus has a claim of $100 against the assets. The accumulated unpaid earnings ($50,000) all belong to the common stockholders. If preferred stock is purchased at any figure in excess of $100, the result is to take assets which belong to the common stockholders and pay them out to these preferred stockholders. Of course, the security behind the shares of preferred stock remaining is also lessened.

If the purpose of acquiring the preferred stock in the preceding illustration was to redeem it and a redemption price was fixed in the articles of incorporation, the corporation can buy back the stock whether or not there is an earned surplus.[11] It thus becomes possible to distribute to the holders of the stock redeemed and canceled a portion of the assets which represent the original contribution of other stockholders and not merely the assets which belong to them by reason of accumulated earnings. Suppose that in the preceding illustration the earned surplus had been $10,000 instead of $50,000. When the preferred shares are purchased, the par value of $100 per share can be deducted from stated capital and only the excess over par need be deducted from surplus. The corporation is thus not limited to paying out only $10,000 for stock purchased. According to section 6 it could redeem the stock if there were no surplus at all in which event any price paid for the stock in excess of $100 would result in taking away from common stockholders a portion of their original contribution and distributing it to holders of preferred stock. Thus where the stock is to be redeemed at a price set in the articles for that particular class of stock, or for that particular series, the power to use corporate assets to repurchase stock is increased because there is no paid-in-surplus limitation. This limitation is also removed by section 6 in the case of shares purchased for the purpose of:

(a) Eliminating fractional shares.

(b) Collecting or compromising claims of the corporation, or securing any indebtedness to the corporation previously incurred.

(c) Paying dissenting shareholders entitled to payment for their shares in event of a merger or consolidation or a sale or exchange of assets.

The power to issue preferred stock without par value increases very materially the power of directors to shift participation in assets as between different classes of stockholders. While the powers in connection with this class of stock have been mentioned elsewhere it is believed desirable to make special mention of it again at this point.

Section 17 provides that "shares without par value may be issued for such consideration as may be fixed from time to time by the board of directors." Under the Illinois Act preferred stock without par value may be authorized and issued. It would seem, then,

[11] According to secs. 6 and 58.

that no-par-valued preferred stock with a certain fixed preferred redemption or liquidation right to assets could be sold at any price which the board of directors choose. The resulting possibilities for the shifting of property rights of other stockholders are immediately apparent. An illustration will suffice to indicate the possibilities. Suppose that the articles provide for the authorization of no-par preferred stock with a preferential right to assets in the event of dissolution of $100. The stock does not need to be sold at $100. It can be issued for "such consideration as may be fixed from time to time by the board of directors." Thus, it would be possible for the directors to sell the stock at $80, for example, and issue it as fully paid stock. But as soon as it is issued the holders of this stock are entitled to a preferential claim against the assets of $100. Where does the other $20 of assets per share come from? The answer is, obviously, from assets to which other stockholders once had rights either by reason of their original contribution or accumulated earnings which accrued to them. The greater the quantity of such no-par preferred stock issued at a price below its preferred right against the assets, the more extensive is the diversion of asset rights from other contributors of capital to the preferred stockholders.

Section 19 (b) seems at first glance to prohibit selling preferred stock without par value at a figure below the amount of its preferential right in the assets in the event of involuntary liquidation. It provides that "if the shares issued shall consist wholly of shares without par value, all of which shares have a preferential right in the assets in the event of its voluntary liquidation, then the stated capital represented by such shares shall be not less than the aggregate preferential amount payable upon such shares in the event of involuntary liquidation." Further in the same section it is provided that that amount shall be the stated capital for this type of stock in the event that the capital structure includes other types of shares.

However, the purpose of Section 19 is to lay down rules governing directors in dividing up consideration received for shares as between stated capital and paid in surplus. This would mean that if the price received for the preferred stock without par value is in excess of the amount payable in the event of involuntary liquidation only such excess could be allocated to paid-in surplus. If it is sold for less than the preferential amount none of the consideration received could be allocated to paid-in surplus. It is not believed that this section in any way limits the power granted to directors in the preceding section to sell shares without par value for "such consideration as may be fixed from time to time by the board of directors." If the interpretation placed on Section 19 should be that if such no-par preferred stock is sold for less than the preferential amount its stated capital has to be equal to the preferred amount payable in the event of voluntary as involuntary liquidation, it would simply mean that the corporation could not declare dividends until it had built up its net assets to an amount equal to the stated value of other stock and the stated value (preferential amount payable in the event of involuntary liquidation) of the no-par preferred stock. This it could do by withholding earnings from *all* classes of stockholders. However, an easier method which would have a more direct effect in shifting of property rights would be to allocate a sufficient amount of the consideration received from some type of common stock to paid-in surplus instead of to stated capital.

It is now proposed to consider further the powers which can be given to directors in connection with the shifting of property rights of stockholders as a result of the provisions in the Act with respect to paid-in surplus and stated capital.

Under Section 19 the directors are given authority to apportion the consideration received for shares as between stated capital and paid-in surplus. Certain limitations are placed upon this authority in the case of par value shares and in the case of shares without par value having a preferential claim against the assets in the event of involuntary liquidation. Thus, in the case of shares with a par value stated capital must be equal to the "aggregate par value of the shares so

issued." The limitation with respect to shares without par value having a preferential right in the event of involuntary liquidation has been shown to mean that no part of the consideration received for such shares can be allocated to paid-in surplus unless the amount received is in excess of the amount of the preferential right. However, in the case of common shares without par value there is no limitation other than that the directors must adopt a resolution showing the amount allocated to paid-in surplus and stated capital within sixty days after the issuance of the shares. This limitation applies to any allocation regardless of the type of stock or of the consideration received. It should be pointed out that this limitation does not make it necessary for the directors to inform the buyer of the stock at the time of the sale how much of his contribution will be allocated to stated capital and how much to paid-in surplus.

It is clear that paid-in surplus is not a profit surplus but is really a part of the contribution of stockholders. When there are several classes of stock outstanding it becomes possible for directors to use this device to give the contribution of one class of stockholders to the shareholders of another class.

One way of accomplishing this transfer has already been discussed in connection with the sale of preferred stock without par value for an amount less than the preferential amount payable to such stock in the event of involuntary liquidation. Another way of accomplishing the transfer is through the payment of dividends. In general, the Illinois Act provides that dividends cannot be paid if thereby the net assets would be reduced to an amount less than the stated value. But paid-in surplus is not a part of stated capital, and so under this general rule paid-in surplus can be paid out in dividends. However, another limitation is imposed by Section 4 (b) which reads as follows: "Dividends may be paid out of paid-in surplus or surplus arising from the surrender to the corporation of any of its shares only upon shares having a preferential right to receive dividends, *provided* that the source of such dividends shall be disclosed to the shareholders receiving such dividends, concurrently with the payment thereof." Even with this limitation it is at once apparent that a part of the contribution of junior shareholders may be transferred by means of dividend declarations to holders of preferred shares. Nor is the possibility of transfer of assets limited to this. By paying preferred dividends with paid-in surplus more earnings are left with which to pay common stockholders who might well be in a different class from those from whom the paid-in surplus was derived. An illustration will serve to make the point clear. Assume that the articles provide for the authorization of three classes of stock, Class A, Class B, Class C. Class A is a preferred stock having a cumulative, preferential right to dividends of 7%. Class B is a no-par stock which is entitled to receive dividends of $5.00 a share before Class C receives any. Class C is to receive the remaining earnings. Suppose, further, that Class C is sold in such small denominations that the majority of the votes are represented by these shares and that therefore this class of stockholder elects the directors. One thousand shares of Class A (par value $100 per share) are issued, 1,000 shares of Class B at $50 per share, and 2,500 shares of Class C at $10 per share. Suppose that when Class B shares were issued at $50 a share, the directors allocated $20 per share of the consideration thus received to stated capital and the rest to paid-in surplus. The corporation earns $12,000 the first year. If the dividends on preferred stock are paid out of paid-in surplus the entire $12,000 is left for distribution between Class B and Class C stock. Class B gets $5 a share or $5,000, Class C gets the remaining $7,000. If preferred shares had been paid their dividend out of earnings, Class C would have received no dividends at all. Thus indirectly Class C stockholders have been paid dividends out of the contributions made by holders of Class B stock. Of course, this procedure also results in lessening the security behind the preferred stock. It should be observed that even if it is provided that Class B and Class C stockholders share dividends

on the same basis after preferred dividends are paid, Class C would still get dividends as a result of the paid-in surplus provided by Class B stockholders. This procedure would alter the rights in liquidation of Class B and Class C stockholders. For example, it might be provided in the Articles that in liquidation Class B was to get an amount equal to its stated capital before Class C was to get anything, but that after that amount was paid Class C was to get the remaining assets or possibly to divide them with Class B stockholders in some ratio. The possibilities for transfer of asset right by directors through the use of the paid-in surplus medium seem almost unlimited. Common honesty would dictate that a contribution made by one group of stockholders which has been set up as paid-in surplus be in some way reserved to the same group of stockholders. However, under the Act it seems quite possible for directors to ignore this principle. What limitations the courts will place upon the use of paid-in surplus for the shifting of property rights is problematical. Of course in any case where fraud is shown, recovery to injured stockholders will probably be granted but, to repeat, fraud is difficult to prove. While the illustration presented might amount to a clear case of fraud it should be pointed out that it was made extreme to indicate the possibilities. If it were modified fraud might be less apparent and it might be quite impossible to prove that the directors acted in bad faith.

Some further consideration of the powers granted to the directors as a result of their power to declare stock dividends is proposed at this point.

Under the authority of Section 41, the directors may declare stock dividends. Such dividends may be in shares having a preference over the stock upon which it is declared provided the articles of incorporation so provide. Even without any provision in the articles of incorporation, section 41 authorizes the directors to issue similar or junior shares as dividends. The power to issue such dividends is not limited to actual earnings but may be issued on the basis of a surplus created by a mere revaluation of assets. As a result of these powers, the directors may shift or alter the relative equities of the different classes of stockholders. The possibilities in this connection may be best indicated by a series of illustrations:

Assume the corporation has two classes of stock, $100,000 7% cumulative nonparticipating preferred and $200,000 authorized common of which $100,000 has been issued. All shares have a par value of $100. There is an earned surplus of $57,000. All back dividends on preferred stock have been paid.

1. The current dividend on preferred stock is paid with $7,000 of par-value common stock. Before the dividend each share of common stock had an equity of $150 in the assets. After this dividend the total common stock equity of $157,000 represents 1,070 shares with an equity of about $147 each. Obviously the equity of the former common stockholders has been diluted because the new common stock was distributed to the holders of preferred shares.

2. In the preceding case, the directors were required by Section 41 (e) to transfer the par value of the stock dividend from surplus to stated capital. They were therefore limited to an issue of only 70 shares. If the common stock had been represented by 1,000 shares without par value, the degree of dilution would not have been thus limited for under Section 41 (f) stock dividend shares can be issued at any value set by the Board of Directors, the amount of surplus transferred to stated capital being the aggregate value so fixed. To the extent that the directors value the new shares at less than $100 (par value in preceding illustration) the degree of dilution would be increased.

While it may appear that the above illustrations represent "imaginative horrors" since usually the common stockholders control the directorate, still it is not impossible to conceive of situations where a bare majority or controlling minority of common stockholders own all of the preferred stock. The type of manipulation represented in the above illustrations produce results closely analogous to the shifting of stockholders' equities discussed earlier in this article in connection with the power of directors to fix

the consideration received for shares. It should be recalled that this type of manipulation—from common to preferred stock—is a power granted to the directors by Section 41 without any special provision in the articles of incorporation.

Under Section 41 (d) if special authorization is made in the Articles the directors are not limited to declaring stock dividends to stockholders whose stock has priority over the stock issued to them as a dividend. In the basis of specific provision in the Articles it would seem that stock of any class could be issued as a stock dividend to any other class. It is obvious that the possibilities in shifting participation rights in assets through the power of the directors to issue stock dividends which has been discussed is materially enlarged. In the preceding illustration it could not only be possible to shift rights of common stockholders to preferred stockholders but the opposite shift could also be effected. Furthermore, it can be effected by the directors even if there is very little or no actual surplus on the basis of which to declare a dividend. Again illustrations will be used to indicate the possibilities.

Assume that a corporation has authorized 2,000 shares of 7%, cumulative, nonparticipating preferred stock of a total par value of $200,000 of which $100,000 has been issued. There is also authorized an issue of 2,000 shares of no-par common stock of which 1,000 shares have been sold at an average price of $100 per share (total $100,000). The earnings have been barely sufficient to pay dividends on the preferred stock all of which, however, have been paid. Since no dividends have been paid to common stockholders a small surplus has been built up. There is a specific provision in the Articles authorizing the directors to pay as dividends shares having a preference over the shares on which such stock dividend is declared.

1. If this surplus is declared out in dividends in the form of previously unissued preferred stock the result will be to give to the common stockholders a portion of the prior right held by the former preferred stockholders. However, in this case since the preferred stock has a par value the directors will be forced to transfer an amount equal to the aggregate of the par value of the shares issued from surplus to stated capital. In effect the common stockholders are buying the preferred stock at $100 per share and the dilution of the old preferred stockholders' interest would probably not be very great. But if the conditions with respect to security, dividend rate, redemption or liquidation value are such as to make it worth more than $100 the dilution would be increased.

2. Section 41 (c) increases the possibility of diluting the interest of the preferred stockholders. As a result of the terms of this section directors may declare a stock dividend on the basis of a surplus created by merely revaluing corporate assets. Thus, to give the common stockholders a portion of the preferential right to assets and earnings enjoyed by the preferred stock all that would be necessary would be for the directors to revalue the assets upward on the basis of an appraisal, create a surplus in this manner and to decrease this surplus and increase stated capital represented by preferred stock to the extent of the par value of the preferred stock issued to the common stockholders as a dividend. The participation of the preferred stock in the assets and earnings of the corporation would thus be diluted in that the same right which formerly belonged exclusively to the old holders of preferred stock would now be divided among more shares of stock. The new holders of preferred stock really contributed nothing and received a portion of the equity formerly belonging to other stockholders.

3. The possibility of dilution of the preferred stockholders' equity is further increased if the preferred stock is without par value. Under the provisions of Section 41 (f) if a dividend in preferred stock is declared to the common stockholders either on the basis of an earned surplus or a revaluation surplus or both, the amount transferred from such surplus to stated capital represented by preferred stock is fixed by the board of directors. Obviously for a given amount of surplus the lower the value fixed by the directors for

each share of preferred stock the greater will be the amount of dilution in the equity of the former preferred stockholders in favor of the common stockholders.

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In the preparation of this article the writer has relied largely upon his own interpretations of the various sections of the Business-Corporation act. No attempt has been made to find and examine pertinent court decisions bearing upon the points discussed. It is quite likely that the directors may have powers under the Act other than those treated in this paper. Conversely, some of the powers indicated may prove to be nonexistent when passed upon by courts. However, the writer believes that the powers enumerated are indicative in a general way of the tremendous power vested in the directorate of a corporation. Where specific powers could be conferred only by provisions in the Articles of Incorporation, this fact has been indicated in the text of this article. It should be noted that most of the powers are granted by the Act itself without requiring specific authority to be included in the Articles. It may be that courts of equity would not permit the directors to exercise their legal powers for the purpose of producing such inequitable results.

When the powers of the directors to deal with corporate property and shift and alter the equitable interest of stockholders therein are reviewed in perspective, it seems that the only protection afforded the stockholders is the good faith, honesty, and moral responsibility of the directors. But even if the directors are imbued with these qualities, various groups of shareholders may still be the victims of the unconscious exercise of some of the powers above discussed, since the effects of these legal acts of the directors may be so subtle as to escape discernment either by themselves or by shareholders. The fact that in Illinois all classes of stockholders are legally entitled to participate in the selection of directors does not generally diminish the risk for it is well known that stockholder participation in corporate elections is more theoretical than real. Active minorities usually control the meetings, especially in large corporations where the opportunities for manipulation are most numerous and the effects most widely felt.

ACCOUNTING AND ECONOMICS

E. A. Heilman

The relation of accounting to economics has been the subject of discussion a number of times at the programs of this association, but no program devoted to accounting relationships would seem complete without some expression on the subject of economics. Articles and whole books have been devoted to the topic in the past few years and it would therefore be difficult to present original viewpoints on such a theme. I propose to limit my brief discussion of some of these relationships almost entirely to the viewpoint of the teachers of accounting and economics, and if an appropriate subtitle for this paper is desired it might be called "The Maintenance and Promotion of Helpful Neighborly Relations between Accountants and Economists."

The economist and the accountant have been members of the same family for a number of decades, since the early period in which economics permitted this fledgling to enter the liberal arts colleges under the shadow of its protecting wing. They later became chief partners with business law in the organization of curricula in business and schools of business.

Liberal arts colleges still have not entirely adjusted themselves to the admission of accounting in a liberal education. The early attitude is well illustrated by the authentic story of the wife of the Professor of Greek who, on meeting the wife of the Professor of Accounting at social gatherings for the second or third time, inquired, "Mrs. Marwick, let's see, what department is your husband in? Oh, I remember, he teaches bookkeeping."

I still remember the consternation caused among the humanists at Iowa when David Friday suggested that there might be as much cultural value in a course in accounting as in the elementary study of a language. This uncertainty about the legitimacy of our subject expresses itself in the contradictory ways in which credit is conferred, some liberal arts colleges giving credit for only the elementary course, others refusing credit to first courses, but permitting credit for advanced work, and still others refusing credit entirely.

The method of instruction employed by early teachers of accounting had much to do with encouraging this attitude even among economists. These teachers had little academic training in their subject and were frequently chosen from the profession rather than from academic circles. The methods used were adapted from business college methods of teaching bookkeeping or were attempts to set up in the laboratory replicas of business practice. "Learning by doing" was the method of instruction and the early texts used were little more than manuals of procedure. Naturally, teachers of economics felt this type of instruction distinctly inferior to the rigid mental discipline involved in following the abstractions of economic theory, and to establish itself as a "respectable" field of knowledge worthy of university acceptance, accounting had to make substantial progress along a number of lines. In the first place, dignified standards of professional practice had to be set up; second, a body of sound principles and theory had to be developed; third, a considerable literature needed to be written embodying these principles and the practice; fourth, satisfactory textbook materials had to be accumulated; fifth, a strong teaching personnel had to be built up.

We were particularly fortunate in the fact that some of the earliest writers, notably Hatfield and Cole, set such a high standard of scholarliness in their first books that economists rapidly recognized the academic justification of the materials with which accounting deals. Unfortunately, teachers of accounting in many cases did not live up to the high standards of scholarship set by these early writings and still adhered to "learning by doing" methods, but the literature of the field has gradually been filled with such numbers of acceptable texts that the standard of teaching has risen very markedly. Satisfactory elementary texts ap-

peared first and gradually acceptable materials have been developed for more advanced courses and in the special fields of accounting, until at the present time a reasonably adequate body of material and literature is available in most parts of the field. Special studies and monographs are as yet not numerous nor uniformly high grade, but each year sees some acceptable additions to the literature. The teaching personnel also has been much strengthened in recent years and is improving. Accounting has therefore established its right to a prominent place in the undergraduate curriculum. In the field of research and in graduate work, however, it still has its place to make, and it is in this direction that it must seek its next development, if it wishes to grow with business education.

With this rather rapid development, a great deal of the suspicion with which the two fields have regarded each other has disappeared, but there is still a tendency on the part of many teachers of economics to look upon courses in accounting and business administration as primarily designed to attract students to whom economic theory may then be taught, and for accounting instructors to look upon economics as an excellent form of mental gymnastics, but too abstruse to be a real assistance in business education. There are, moreover, rather fundamental differences in objective, in viewpoint, in the character of the material dealt with, and in the methods of instruction which operate to keep alive some degree of misunderstanding. Economics still deals largely with the social aspects of production and distribution, whereas accounting is interested chiefly in the internal problems of the business enterprise, and looks on its activities largely from the viewpoint of the particular entrepreneur. Procedures, techniques, and concrete factual material necessarily make up a large part of the materials with which the accountant works, whereas the economist must deal in broader terms with the economic factors of production. In method of teaching there is also a considerable contrast between the lecture and discussion method needed in Principles of Economics and the larger use of problem and laboratory methods in accounting. These differences inhere in the character of the subjects themselves and to a large extent will always persist.

We have had in recent years a number of able defenses of the dignity and prestige of accounting and accounting instruction, of its theoretical soundness, of its cultural significance, and there have been a number of earnest attempts to lead to a more complete rapprochement between the two sciences.

However, there are many indications that the two fields are coming closer to a mutual understanding. Economics is developing most rapidly in the field of statistics and statistical method, and in this type of study is reaching more and more into fields hitherto largely the habitat of the accountant. Also, finance and marketing, among others, are studying problems closely connected with accounting and in which the accountant is apt to contribute much of the useful material. The accent on statistical techniques is bringing the methods of instruction in some economic courses nearer to the methods used in accounting instruction. Important as are the differences between the methods used in statistics and those used in accounting, the problem and laboratory methods of instruction usually common to both subjects make for greater mutual appreciation of the problems of the two fields. This accent on statistical study in economics will undoubtedly be greatly increased in the future and further hasten the rapprochement.

The accountant also is finding greater necessity to use economics in his work, particularly the principles of finance, which aid him in the setting of financial standards, both for purposes of instruction and for the study of the problems of particular enterprises he may be serving in accounting practice. C.P.A. requirements, in an increasing number of states are adding examinations in some fields of economics which is recognition on the part of the public accountant of the utility of economics in the practice of his profession.

The business man also in the past ten

years has found the economist of use in making studies of his market and of the effect on his market of general business conditions. Unfortunately for the economist, the type of information called for has been chiefly material to be used in the forecasting of business conditions, and the events of the past five years have so largely discredited that use of economics as to turn many business men completely away from "economists" whose opinions proved so completely misleading. Economics has undoubtedly suffered much in the eyes of the more intelligent business men from misguided attempts to use economic facts for forecasting purposes.

With the era of self-regulation of industry inaugurated under N.R.A., a better understanding of the effects of policies of the individual enterprise on the market situation in the industry as a whole becomes essential to the business man, and the social viewpoint of economics should be of more apparent importance to him. In this interest of the business man in economics, the practicing accountant and the university instructor should therefore share.

At this point, the fact should be emphasized that accounting and economics complement each other to a high degree in the undergraduate curriculum. For the undergraduate the rigid mental discipline in abstract reasoning which is necessary in courses in economic theory, in business cycles, in courses on labor, on monetary policy, is of extreme importance. On the other hand, the analysis of actual business figures, the insistence on exactness of detail involves a discipline which is just as much needed by the student of business. The contrast of the two subjects is fortunate. Excellent students would seriously miss the mental stimulus to be obtained from a keen analysis of a problem in the more highly theoretical fields of economics, but the same student would lack a training which is absolutely essential to prepare him for business, if he were not required in courses in accounting and statistics to pin himself down to exact results where they are obtainable, trivial though some of the details involved in getting these results may sometimes seem to be.

We must continue our insistence on exactness and form and subject the student to a reasonable amount of detail. Too many courses in which exact results are not obtainable tend to raise in him an impatience of detail which may make him largely useless to an employer, and many of our graduates have to go through a trying period of adjustment to this requirement of business.

Also, the contrast of the methods of instruction is desirable from a number of viewpoints. Lectures and discussion in economics and laboratory and problem work in accounting aid in making a well diversified schedule of work. Even at a university there is worthwhile discipline to be derived from proper laboratory work in accounting. The student's time and preparation is most effectively used if he varies his program between courses like accounting and statistics in which he must keep up-to-date on a fair amount of daily assignment work, and lecture courses in Labor and Finance in which his reading may be done at less regular intervals when longer periods are available for more extensive reading. In fact, lecturers on economics sometimes complain that the demands of accounting and statistics courses for daily work incline students to neglect their reading courses until the end of the fiscal period, when a series of intense appraisals and adjustments are used to bring them into the final statements.

An ideal program is therefore one which makes a good combination of the two types of courses. This common responsibility to our students should be more frequently recognized by instructors in each field and the economists' suspicion of practice should be tempered by the recognition of the necessity of more direct contact with the concrete facts of business operations, and the accountant's impatience with abstruse theory, as of little practical significance, needs to be checked by the realization of the vital importance of understanding fundamental social forces and relationships.

While the disciplines in which they are giving instruction differ in many essential

points, and methods of instruction also diverge, there is urgent reason why the instructor in economics should understand the methods used by the accountant in his analyses, and why the instructor in accounting should appreciate the problems and methods of economics. Generally the need for sound economic training for the accountant, and especially for the accounting instructor has been pretty well recognized, and our students are going out into accounting practice with a reasonable background of economics, while the younger accounting instructors are being more thoroughly trained in economics than was the case ten years ago.

Most instructors in accounting are probably sufficiently familiar with economics to assist in the teaching of elementary courses in economics. Indeed, some schools insist on this combination as part of their preparation.

On the other hand, the necessity of accounting training for the economics instructor is, it seems to me, more frequently lost sight of. Like elementary mathematics and languages, accounting is a subject which is best started early in the undergraduate career, and is felt as a considerable burden by the graduate student who has to take up the subject at a late day. He feels he can ill spare the time to master the amount of technique necessary to understand the fundamentals of accounting, therefore he avoids this step, if possible. As a result, many young economists later undertake research projects for which a knowledge of accounting would be highly desirable. Understanding the accounting conceptions underlying their data and the methods that have been used in originally preparing them, would enable them to appreciate the limitations of the material much better and probably avoid gross errors in interpretation. Professors of economics are frequently guilty of setting these research problems for students who have not had the proper accounting training. To quote from Professor Canning:

> If economists are to carry forward their professional investigations upon their present broad basis, and with their present point of view, they may choose among a too great reliance upon intuition, an uninformed use of accounting data, and the serious and arduous study of accounting procedure that will enable them to resort to the best available statistical material on enterprise relations. . . . The notion, still too commonly held, that an elementary course corresponding in content to most university first-year courses in accounting will confer upon the young economist a competence to use accounting data in his economic studies, must be abandoned. A sufficiently intimate knowledge is not so easily obtained.

The needs of such graduate students can undoubtedly be better met by special courses in which the minimum of technique is presented, possibly a course such as might be offered to the student of law would be satisfactory, but work in the interpretation of accounts and statements beyond what is ordinarily given in elementary courses, is certainly needed.

In so many fields of economic investigation the economist has to deal directly with data which can be supplied to him in the first place only by the accountant, the broader utilization of which depends upon the knowledge of fundamental economic doctrines and relationships. There is therefore necessity of coöperative study or at least of understanding interpretation by one well trained in both sciences.

Studies of: income as to source, determination, and distribution; particularly cost studies, both in individual companies and for sections of an industry; of capital, as to source, utilization, retirement and replacement, formation in industry; of debt; of the capital structure of corporations; and of many other problems of vital importance to both economist and accountant are still in their infancy.

It is my belief that most of this work should be done by the accountants; at least the accumulation and preliminary interpretation of the data from corporate sources should be carried forward much further by the accountant than has been done so far. Our graduate students usually have the necessary background in both sciences which would make possible accurate analysis and interpretation, and we should hope that they

will therefore be the ones to make important contributions to solving these common problems. This represents the next important step in advancing the scientific standing of our subject. After having completed most of our course work in accounting as undergraduates our graduate students find it necessary to turn to more work in economics and statistics for further training. These common fields, therefore, offer opportunities for further study which will be of benefit to them and also build up the reserve of research materials and studies which will be evidence of the ability of the accountant to go beyond the development of procedure. New research methods may have to be developed for some of these fields, the successful development and application of which may be one of the best vindications of advanced study in our field. Until such methods and a considerable volume of good research studies may be drawn upon, graduate courses in accounting should be slow to develop.

In general it may be said that the accountant has so far done little in the accumulation of worthwhile materials of this type. To quote from an address of Sir Josiah Stamp to the chartered accountants of London:

> Scientific accountancy has now been developed for some fifty years, but I cannot trace that it has yet made a single substantial contribution to economic science over its own field of the analysis of the results of industry, although it has practically a monopoly grip on the required data. I am not referring as much to costing details, which are hardly uniform yet, as to the ordinary trading results, balance sheets and their details. The extension of scientific costing methods is becoming daily more widespread, and each business is accumulating for itself a vast amount of valuable matter. I do not see any prospect at the moment of any general principles or deductions being arrived at by bringing all these results together and seeing what lessons they teach.

This indictment of the practicing accountant, though made over ten years ago, is still substantially justified.

These studies of income, costs, and capital might be undertaken by accountants in a number of different ways, each of which promises at least some degree of success. The use of published statements with all their defects and lack of comparability well known to the accountant still leaves the possibility of useful studies if properly controlled. The study of trades or districts through trade associations, code authorities, and bureaus of business research is also possible in some cases with coöperative effort.

The use of the detailed and extremely useful material found in the working papers of practicing accountants has been suggested many times, but so far the practitioner has shown little disposition to make any such use of his files, though he himself would frequently be the gainer from data that might thus be supplied by other accountants. Gilman has suggested this source of data as promising more dependable results than any other, when the profession feels that it can disclose such material. Those accounting instructors who are also in practice should have the opportunities for making material available which would be useful and they might also be expected to have sufficient of the viewpoint of the researcher to be interested in doing so. Heretofore this has seldom been the case and in a study which was made of one industry in the Twin Cities two years ago one of the outstanding refusals of information came from a concern, the proprietor of which seemed willing to lay open his costs, but whose accountant, a member of our extension staff, advised strongly against giving the data. These working papers might be utilized for interesting case studies of actual concerns which might illustrate or help to explain certain financial results due to changing business and other conditions. At a later date more comprehensive studies covering numbers of companies might thus be made. In analyzing the statements and operations of any firm, the need of bases of comparison is appreciated by all practicing accountants and analysts.

Support should be lent to the efforts of the economist to obtain analyses and summaries of the mines of information in the files of the income-tax unit. Such data may be biased by tax considerations but would at least be more consistently prepared from

a single viewpoint than any other body of similar material. Under the new Securities legislation more complete statements should soon be available which will probably prove more valuable and reliable for study by the accountant. Thus far only rather inconsequential amounts of such research work have been done. This is primarily the field of the accountant, useful though the results may be to the economist. Certainly the groundwork should be done and most of the interpretations made by the accountant.

When we compare the amount of research done in the field of accounting with that in the older fields of knowledge, we must frankly admit the surface has hardly been scratched. How far we can ever go may be open to question, but progress is possible along a good many lines at present and we shall not reach the limits of the resources available for some time. Further progress in accounting knowledge is absolutely essential to the development of graduate work in accounting. Research methods and materials must be developed before this work can be put on a plane to command the respect of the older departments of the university. While accounting practice enriches the knowledge of the practicing accountant himself, it seldom is an aid to others in the profession of teaching and only rarely leads to publication of any of its findings. Such practice is frequently referred to as research, but it lacks the chief justification of research, namely: the enrichment of the sum total of what is known and available to others. The efforts of our Committee on Research and the program devoted to graduate work in accounting at this convention are steps in the direction in which progress seems to me most needed. It is this type of work which opens up greater opportunities for our own graduate students and permits closer coöperation with the social science of business, economics.

COMMENTS ON PROFESSOR HEILMAN'S PAPER

Clem W. Collins

Because of the shortness of time allotted to this subject on the program, Professor Heilman has stated that he has bluepencilled a good many paragraphs in his paper. After reading his very excellent presentation, I should be most happy to read his deleted paragraphs, for I feel that they would contribute more than I could personally to the subject.

In listening to Professor Heilman's discussion one is impressed with the uncertainty as to whether Accounting is an illegitimate child, a step-child, or is in fact the father of Economics. I do not know that I can quite agree with the inferiority complex, which we are apt to have concerning these two fields. As a matter of fact, if we look up the history of both, we will find that books on Accounting appear much earlier than do those on Economics. In other words, applied economics apparently first engaged the thought of men, and after this economic theory was developed. Be that as it may, we are now concerned with the existing relationship between these two sciences.

Accounting, as well as Economics, is developing social aspects. Many social and economic adventures of far-reaching significance are being suggested and undertaken at this time, the success or propriety of which will be determined largely through Accounting. From a social standpoint we can hardly find any worthy objections to projects such as the T.V.A. if they result in raising the standards of living of large numbers of people. From an accounting standpoint, however, it must be at least partly judged by its ability to accomplish these results at a reasonable cost, and that cost must take into account taxes, cost of money, and other overhead expenses which a privately owned utility would necessarily have and which a publicly-owned utility has equally as much but which is often lost sight of by improper accounting.

The accountant of today cannot properly interpret financial records and history without giving due consideration to the fundamental theories of Economics involved. A knowledge of Economics is therefore an essential part of the equipment of an accountant. Similarly, the economist needs the discipline of exactness and the appreciation of quantitative factors which Accounting

gives, and, therefore, in my judgment, a knowledge of Accounting should be required of any student who intends to specialize in the field of Economics. The course known in some colleges as Introduction to Business is an attempt to so correlate these two sciences and bears testimony to the feeling on the part of many educators that there is a strong relationship and interdependence of the two.

In this time of "braintrusting," when theory is apt to carry one beyond the realm of fact, too much emphasis cannot be placed upon the importance of a knowledge of ascertaining cold hard facts, such as is the province of accountancy. Facts that may be developed through accountancy could, and probably would, if made available, radically change many existing economic theories. Business failures which are frequently termed "economic losses," and properly so, are largely due to poor accounting.

We hear much discussion today of the subject of economic planning, and most students agree on this principle and differ only on the extent to which it should be carried out. Any planned economy must depend upon facts developed through proper accounting, and it may also be stated that an almost certain result of a planned economy would be improved accounting methods. An example of this is found in the Codes which are being adopted in the several industries. These Codes necessarily include provisions for certain accounting procedure, with the trend toward uniformity among those engaged in a given industry.

The problems of the economist center largely around the relationship between capital, labor, and consumer. All three of these classes are vitally concerned with the accounting principles involved in the legislation which has been passed and is being considered and popularly known as the "New Deal." Capital is concerned over the matter of a fair return, and this can be determined only through accounting. Labor is concerned with shorter hours and higher pay. Only through proper accounting can the extent that these changes will affect the expenses of a given business be determined. The public is concerned with the selling price of what it buys, and this again can be determined only through proper cost accounting methods. All these matters indicate a very close relationship between Economics and Accountancy, a relationship which I believe should be, and is, growing closer every day.

ACCOUNTING AND BUDGETING

Edwin L. Theiss

Accountants and teachers of accounting have been observing with considerable interest the steady development of business budgeting, especially during the past fifteen years. At first many of us were somewhat suspicious of this new type of managerial control, for no other reason probably than that it was new and untried. Many disapproved of it, because it proposed to convert the raw material of factual accounting data into the finished product of budgetary estimates. To many accountants this procedure seemed to be a misuse of accounting data, and any such professed forecasting of business operations appeared to be unreliable, if not altogether impossible.

As time went on, however, budgeting was thoroughly tried out and tested by management. Many experiments were made. Budgetary methods were studied. Cost accountants were open-minded and contributed generously to the development of its technique and procedures. Executives and financial accountants also tried their hand at the preparation of budgetary estimates. Thus with the general endorsement of many executives and accountants, budgeting has attained a permanent and important place in the science of business management. But doubt still remains in the minds of some public accountants as to how far accountants should enter into the field of budgeting. It has been said recently that accountants may engage in budgetary work but not as accountants. Budgeting involves prophecy and "Prophecy has no part in Accountancy. The accountant deals with the past. He has nothing whatever to do with the future. Accountancy has always been the science of things done." This is the recently expressed[1] opinion of the editor of the *Journal of Accountancy*, which purports to be the official organ of the oldest national accounting organization in the United States. We are inclined to believe, however, that this is not the opinion of most public accountants. Such a position is certainly untenable, unless accountants wish to relinquish to others one of their primary functions, namely the interpretation of accounts.

Most of us will agree that accountants should refrain from mere prophecying. They should stay by the work at hand and perform those functions that accountants are able to perform well. In other words prediction is not the function of accountants.

Mr. Henry B. Fernald recently expressed[2] well the true meaning of the business budget in these words: "In my conception the budget is not and should never be represented as a prophecy. It is rather a plan or program of action, and may be, and often is, made an authorization for action. Budgets which are conceived as attempts to foretell the future are apt to fail of such a purpose. The budget which is conceived as a plan or program of action or is considered as an authorization for certain expenditures, or for certain expenditures as against certain receipts, can be made to work successfully. . . . The preparation of the budget involves obtaining the best estimates possible as to the probable future income and expenditures of the business. . . . We cannot have proper budgets without the correct application of accounting principles. Accordingly, budgeting will fail without accountancy."

In order to understand with some degree of clarity the true inter-relationship of accounting and budgeting, we should agree, first of all, on the meaning of the two terms. What then do we mean by accounting?

Numerous attempts have been made to define accounting but practically all these definitions emphasize unduly the functions of financial and public accounting, and give little or no recognition to the functions of cost accounting. Strange as it may seem, according to most definitions of accounting,

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[1] *Journal of Accountancy*, July, August, and September, 1934.

[2] *Journal of Accountancy*, September, 1934, p. 227.

the field of cost accounting is either ignored or definitely excluded. Cost accounting appears, therefore, to be a misnomer, in fact it isn't recognized as accounting at all. "It is quite distinct from the problems of general financial accounting, and represents a part of the statistical side of scientific management and efficiency engineering."[3]

At this point let us examine the purposes and procedures of cost accounting. It must be admitted that cost accounting, like financial accounting, performs a basic recording function. It involves enough record keeping and record designing to warrant its recognition in any general or basic definition of accounting. Cost accounts are usually integrated with the general records and are an essential part of the accounting system.

Moreover, cost accountants, like financial accountants, aim to interpret their own records. An increasingly large amount of the interpretation function of accounting, for the purpose of giving management promptly informational data on current operations is now being performed by cost accountants. Standard costs and standardized revenues cannot be ascertained without interpreting fully the accounting records of past and present performance. To be sure, the records are detailed and their interpretation requires the application of various statistical procedures, but that would not seem to justify the placing of cost accounting in the field of statistics. Nor does the fact that the cost accountant makes use of engineering technique and procedures in the computation of standard costs, mean that the cost accountant assumes the role of engineer. He is still an accountant in the broad meaning of that term and as long as his work centers in the records and in the interpretation of those records, that work remains essentially an accounting service. When, then, the cost accountant goes one step farther and devises for management some means of controlling manufacturing operations, as the production budget, for example, he is functioning not as a prophet but as an accountant, provided his production budget is prepared in accordance with sound accounting principles, and built upon data drawn from the accounting records, properly interpreted. He must, of course, base his production budget upon a scientifically prepared sales estimate, which calls for a consideration of probable cyclical changes, and he will need the coöperation of the industrial engineer on such matters as plant capacity, production scheduling, and economy of processing. In such technical problems, however, he is the advisee and not the adviser.

We have examined the nature and functions of cost accounting here, merely in order that we may be able to arrive more nearly at the true meaning of accounting itself, and then give consideration to the question of the relationship that exists between accounting and budgeting. Obviously accounting is something more than the science of keeping records for purposes of financial control which science when applied aims to protect the interests of creditors and provide a continuous and accurate history of the original investment of stockholders and subsequent changes in their investment. This is without question an important phase of accounting, and one which has acquired wide public recognition, mainly because of the services rendered by the profession of accountancy in the interests of the public. Accounting, however, is intended to serve management as well. Financial or general accountants within a business do attempt to render a service to management but only in a limited way. Comparative monthly financial statements are prepared for a series of months or months of preceding periods. Plus and minus differences are observed. Percentages and graphs are used when desirable. Ratios of financial statements are prepared and trends of ratios are analyzed. All of this to give management a true picture of the financial condition and the financial progress of the business as a whole. Public accountants also use similar devices for the purpose of informing clients on their financial condition.

Management, however, is entrusted with the continuous control of operations and is expected to show results in net profits. If management is to exercise an effective con-

[3] *Principles of Accounting*, Paton and Stevenson, page 619.

trol of its internal affairs, functional officers must be informed continuously, and this information should be made available promptly. Internal control calls for a system of detail records, from which statistical summaries can be drawn regularly or oftener if desired. Accounting records of daily operations must be maintained, so that operations may be measured for their efficiency. Post mortem records are of little help. Costs should be known or at least knowable, while they are being incurred, and in many cases before they are incurred. Some kind of standards, other than past performances, must be devised for controlling current operations. These needs of management are being met to some extent by means of statistical summaries in the general accounting department, but in a larger measure by the efforts of cost accountants. This type of accounting is pointed towards internal control over operations, while financial accounting aims to provide an effective control over transactions between the business and outsiders. Both are necessary, and the one is complementary to the other. Financial and Public Accounting are ineffective without adequate accounting for operations.

These observations on the essential unity of accounting, as contrasted with the limited concept of accounting that seems to prevail quite generally among public and financial accountants, at present, suggest the desirability and necessity of restating the meaning of the science of accounting in terms that will not merely define correctly its nature in respect of theory but also describe its scope and functions from the standpoint of practice. These functions call for a wider application of accounting to meet the needs for more effective controls in all phases of business administration. To summarize briefly: accounting is the science of recording all business transactions properly and accurately, and of interpreting these records for management, both in the form of periodical summaries, from those books that contain the record of transactions with outsiders, and in the form of continuous reports on all internal operations, from detailed records and statistical analyses. This is the basic concept of accounting that we shall accept for our consideration of the relationship between accounting and budgeting.

It might be well also to recognize here the procedures properly belonging to the field of accounting. In financial accounting the following procedures are followed: Recording of transactions on the general books of account, summarizing records periodically in financial statements and interpreting financial statements by means of comparative statements and ratios.

The procedures of the public accountant include: auditing the records, adjusting records for valuation purposes, preparing financial statements and supplementary schedules, interpreting statements, installing general accounting, cost accounting and budget systems, making special investigations and preparing income tax returns.

The cost accountant supervises the recording of internal transactions, prepares current cost reports, interprets these reports, computes and uses standard costs and budget costs.

We shall now set forth briefly what properly belongs to the field of budgeting. This relatively new field cannot be said to be a science although a considerable body of knowledge has already been accumulated, both as to principles and theory, and the application of principles in practice. The scientific method, however, is generously applied, both in the preparation and enforcement of the budget. Budgeting may be described as an attempt to coördinate the principles and procedures of cost accounting, industrial and management engineering, and statistics, for the purpose of measuring, recording, and reporting currently *all* the operations of a business enterprise. The ultimate purpose is to place in the hands of management a device that can be used effectively in the control both of external and internal transactions. Budgetary estimates are merely a means to an end. They are not the control itself and are not intended to displace the function of management. They are merely supplementary aids to help managements, in the accomplishment of a more effective control. Budgeting applies cost accounting

principles to the control of all operations, manufacturing, selling and financing.

Budgetary procedure calls for the following.

In respect of accounting:

1. Budgetary classifications are made to conform with the accounting classification.
2. Data are drawn from the accounting records, and used as a basis for preparing estimates.
3. Future financial statements are prepared.
4. Budgetary reports present a comparison between the estimates and actual performance, as drawn from the current accounting records.

In respect of industrial and management engineering:

1. Standards are set for all operations, through time studies and analyses.
2. Budgetary routine is made to conform to the best organization plan possible. Authority and responsibility are definitely fixed.

In respect of statistics:

1. Analytical studies are made of past performance to ascertain secular trend, seasonal variations and cyclical influences.
2. Potential markets are determined for territories and products.
3. Variances on budget reports are interpreted and accounted for.

Obviously the accountant and the budgeteer are engaged in fields that overlap. Certain procedures of budgeting reach into the accounting records for basic data on past performance which data are used in preparing the estimates, and finally, in budget reports, budget estimates are compared with actual performance recorded in the current ledgers. In other words the budgeteer uses the records of the past in projecting his statistical ledger of future operations. In fact, he deals with three sets of records, two of which are strictly speaking accounting records.

1. The accounting records of the past.
2. The accounting records of the present.
3. The projected ledgers—in the form of budgetary estimates.

Moreover, he prepares future financial statements and attempts to interpret these statements by comparing them with financial statements as of the beginning of the budget period. He follows the accountant's method of preparing comparative statements and applying ratio studies. Therefore, in order to perform these duties that are basic in the preparation of a business budget, the budgeteer should be thoroughly familiar with accounting principles. To mention only a few possible errors. If he ignores the generally accepted principle, of "accounting for the going concern," in estimating valuations of fixed assets, if he does not understand the accountant's attempt to classify capital and revenue expenditures properly, or if, in his determination of future net income, he includes unrealized profits, the budgeteer will most certainly produce estimates that will be misleading and dangerous, if management adopts such incorrect estimates as their standards for future performance. If this basic work in preparing the budget is performed by anyone who is unfamiliar with accounting, many errors will appear in the estimates, and the super-structure of the budget will be as defective as the foundation.

The statistical work of the budgeteer also takes him into the accounting records. Data for the computation of secular trend and seasonal indexes are drawn from the accounts. Accounts may have to be analyzed and broken down into several classes of time data. We are of the opinion that anyone, who attempts to analyze accounts, and does not understand the purposes and procedures of record keeping, is not qualified to gather statistical data from the accounts. It is properly the function of the accountant to analyze and interpret his own records, especially when such analyses are to be used in computing significant trends. It would be perfectly appropriate to have trends and indexes computed by the statistician but the analysis of accounts for data to be used in that computation belongs to the accountant.

Some of the more technical statistical work is performed better by statisticians, than by others.

The budgeteer will also need the coöperation and advice of the industrial and management engineer, for handling organization and technical operation problems. For example, the preparation of time studies, fixing of cost standards, and production schedules are logically the work of specialists in the field of production or cost accounting. In these and similar problems the budgeteer uses the results ascertained by those who are peculiarly fitted to make such computations, and he does not profess to apply their technique, although in time he may become very familiar with their methods and procedures.

It is evident, therefore, that, since much of the groundwork in budgeting involves the use of accounting records and the application of accounting principles, it would seem logical for accountants to perform this service. Many financial and cost accountants are already engaged in the budgeting field, and numerous public accounting firms offer budget installations as one of their regular services.

The fact that budgeting requires the preparation of estimates should not mean that accountants are unqualified. In fact estimating is frequently required of them in their regular accounting work. The simple matter of providing for depreciation of fixed assets in the accounts makes it necessary first to estimate the probable life of those assets and secondly to decide whether the straight line, reducing balance method or some other method should be used depending upon how the fixed assets will probably be consumed. Testing the adequacy of reservations for bad debts always involves an estimate of the probability of collections. If accounting deals only with facts, as recorded in the accounts, why do accountants recommend the setting up of reserves for inventory fluctuations, reserves for sinking funds so as to protect working capital against possible unwise dividend distributions, reserves for contingencies, reserves for guarantees, and reserves for plant extensions? Contingent liabilities are only possible liabilities and yet public accountants feel it is their duty to reveal all such liabilities, on financial statements. To determine that some investments belong in the current asset group while others should be shown as permanent investments calls for an opinion as to the probable length of time such investments will be held by the business. In mergers and consolidations goodwill is often computed on the basis of capitalized future income, and newly proposed issuances of securities call for an estimate of future working and permanent capital needs.

The simple monthly adjustments for accrued and deferred items result in the assignment of certain expenditures and certain incomes to future periods. The advisability of writing up or writing down fixed assets depends partly upon what changes may or may not be expected in general economic values. Problems of valuation, which are constantly confronting accountants, require careful estimating of present and future values on some accepted basis. On special occasions accountants are expected to prepare statements of affairs, and in such cases estimates must be prepared to fit the probable conditions of the immediate future. Cost accountants have for a long time used predetermined burden rates for burden under normal conditions. Standard costs of various kinds are predetermined costs.

Enough examples have been cited to indicate that accounting practice and procedures involve the frequent use of estimates, as a part of ordinary accounting. If, therefore, accountants are already successfully engaged in the making of various estimates, most of which are brought into the accounts themselves, it would not be presumptuous to assume, that they might be equally well qualified, because of their experience to prepare budgetary estimates which are not entered in the records. Their exercise of caution and their desire to proceed conservatively in accounting estimates would give assurance that they would not act otherwise in the preparation of estimates. If accountants refuse to render budgetary service, however, others, less qualified, will attempt to perform this very important service for management, with the result that budgeting will

misuse and abuse accounting data, and management will be denied the maximum benefit of using budgetary estimates, that are prepared in accordance with sound accounting principles.

Much depends, of course, upon the attitude of accountants themselves, as to whether or not budgeting is to take its place along side of other accounting services. Budgeting undoubtedly offers a new opportunity for accountants to fulfill their self-assumed function of interpretation. Executives prefer accountants for this new type of work, and certainly accountants will assume this new responsibility as a regular part of their services. If then accountants of the future are going to be expected to work with budgets, we teachers of accounting will feel the responsibility of training accountants of the future in budgetary procedures and principles.

ACCOUNTING AND LAW

Willard J. Graham

When it was first suggested to me that I should present to accounting instructors the subject of Accounting and Law, I found it necessary to consider at least three distinct phases of the subject, any one of which appeared to me to be of sufficient importance to warrant discussion.

These three aspects of the subject may be stated briefly as follows:

(1) Accounting training for the lawyer.
(2) Legal training for the accountant.
(3) The relation of accounting practice to law practice.

Stated more completely the first of these problems raises the following issues. What provision should be made for insuring that the student of law secures some knowledge of accounting? Do the general accounting courses offered in our schools of business meet the law student's requirements, or should a specialized course be developed for him, either in the law school or as a part of his pre-legal training? If so, what should be the nature of such a course? These issues have been discussed before this group more than once; I shall not presume to take your time in discussing them further.[1]

In passing, however, may I tell you that in so far as the University of Chicago is concerned, this problem has been settled, at least for the time being. For three years we offered a special elective accounting course within the Law School itself, to be taken for credit towards a law degree. More recently, as the Law School has been able to secure more complete control of the pre-legal curriculum, accounting has been made a required course in the law student's junior year of pre-legal work. We are now in our third year under this plan and find it highly satisfactory. Special materials have been developed[2] and in this one specialized course we attempt to give the law student such accounting training as he requires in his formal law course and in his subsequent law practice.

The second phase of this subject relates to the legal training of the accountant. It would seem that if we, as accounting instructors, assume the responsibility for the accounting training of lawyers, the law schools in turn should offer specialized legal training for accountants; to my knowledge, at least, this is not the general practice. Such training in law as most accounting students receive is secured either as a part of their accounting training or in the usual "business law" courses developed in our schools of business. Some few accounting students secure more formal training in law by taking a few of the regular courses in a law school. Only in a very few cases, however, do they complete a full course in law in addition to their business and accounting training.

It is scarcely to be hoped, at least in the near future, that law schools will be of much assistance in the legal training of accountants—certainly not so long as a majority of law teachers are not familiar with the work of the accountant and do not know what special type of legal training is best fitted to his needs. What this training should be is discussed later in this paper.

The problem of the relations existing between the lawyer and the accountant may be most briefly described by the phrase "cooperation vs. competition." The literature of both fields contains voluminous exhortation to the effect that neither accountant nor lawyer should go beyond his professional capabilities; that the lawyer needs accounting training, yes, but primarily in order that he may know when to engage the services of an accountant; similarly, that the accountant needs some legal training in order that he,

[1] H. W. Kendrick, "Accounting in the Law School Curriculum," Accounting Review, March, 1931, pp. 38–41.
Willard J. Graham, "Accounting in the Law School Curriculum," *American Law School Review*, May, 1931, pp. 215–227.

[2] Graham, Willard J., and Katz, W. G., "Accounting in Law Practice," Callaghan and Company, Chicago, 1932.

Law Questions in American Institute of Accountants Examinations, 1927–34

	1927		1928		1929		1930		1931		1932		1933		1934		Total
	May	Nov.	May	Nov.	May	Nov.	May	Nov.	May	Nov.	May	Nov.	May	Nov.	May	Nov.	
Negotiable Instruments	4	4	4	4	3	3	2	2	1	1	1	2	4	3	2	2	42
Contracts	3	3	3	1	1	1	0	4	2	0	2	4	2	3	2	2	33
Corporations	2	2	2	1	2	1	2	2	3	1	1	2	1	1	2	1	26
Taxation	2	2	2	2	2	3	3	1	1	1	1	1	1	1	1		24
Partnership	2	2	2	1	1	2	2	1	1	1	1	1				1	18
Sales*				1	1	1	3		1	2	1	1	2	1		1	15
Bailments*					1	1			1		1		1		1		6
Suretyship				1						1	1		1		1	1	6
Trusts									1	1					1	1	4
Bankruptcy and Insolvency				1	1		1			1							4
Agency*						1		1	1	1							4
Insurance*				1				1		1							3
Mortgages										1	1			1			3
Personal Property*											1					1	2
Equity					1										1		2
Torts												1		1			2
Patents															1	1	2
Constitutional Law														1			1
Miscellaneous					1						1					1	3
Totals	13	13	13	13	14	13	13	12	12	12	12	12	12	12	12	12	200

* Insurance, Agency and Sales include some questions which in a general way might be called "contracts." Some of the questions on sales, bailments, and personal property are very similar.

in turn, may know when to secure the services of a lawyer; that the members of each profession should be trained to appreciate the value of the services of the other profession; that while training in both fields is a great advantage, there should be specialization in one field or the other and no one should attempt to practice in both professions at the same time.

Such statements as these get us nowhere in our attempt to delimit the fields of professional practice in law and in accounting and to establish what should be the relationship between lawyers and accountants. In the main it should be one of coöperation. There are so *many* situations in which both types of professional services are required and so *few* situations, relatively, where there exists actual competition between the two professions, that it is futile to belabor the point unduly. It may be noted, however, that there is not complete unanimity of opinion on the question of the respective functions of the lawyer and the accountant in certain fields; outstanding in this "no man's land" are tax practice, receiverships, trusts, liquidations, mergers, incorporations, and similar types of professional work where there are many "border-line" situations. It is scarcely my function at this point to clarify this issue and to divide the disputed territory between the two professions. Further mention is made later of their coöperative activities.

The main purpose of this discussion, as I see it, relates to the legal training of the accountant. What are the responsibilities of our schools of business in this matter? And do these responsibilities rest primarily upon us as accounting instructors or do they fall rather on the teachers of business law in the schools of business? At Chicago the responsibility is divided. The regular law courses required of all business students provide the accounting student with a certain amount of legal training appropriate to his particular needs. This training is supplemented, of course, in some of the accounting courses, where certain types of legal problems must of necessity be considered. I have the impression, not verified, however, by exhaustive study of the facts, that this same situation exists in most other schools of business. The extent to which this consti-

tutes a satisfactory solution to the problem depends upon the nature and the quality of the "business law" course.

In determining the type of legal training best adapted to the needs of the accounting student there are two possible avenues of approach. The *indirect* approach is based on an analysis of the law questions found in public accounting examinations. Can we not assume that the examining boards of the respective states, and of the American Institute of Accountants, in their preparation of law questions for the examination, are guided primarily by their knowledge of what the candidate will later encounter in accounting practice? If this be true, a training in law which will enable the accounting student to pass the law section of the accounting examination is at the same time a proper training for subsequent practice.

Following this assumption, at least for the moment, I have analyzed the law sections of the American Institute examinations, for the years 1927–1934, inclusive, a total of sixteen examinations. There is presented on p. 163 in tabular form the results of this analysis.

The outstanding favorite seems to be negotiable instruments; in every one of the sixteen examinations there have been questions on this subject—usually three or four—a total of forty-two questions in all. Contracts run a close second, with a total of thirty-three questions, and only two examinations have lacked questions on this phase of the law. Corporation law and taxation are next, with totals of twenty-six questions and twenty-four questions respectively. One would have expected that these two subjects would head the list—particularly corporation law, for there is so much law in corporation accounting, (and so much accounting in corporation law). There have been eighteen questions on partnerships and fifteen questions on sales; some dozen other subjects account for from one to six questions each. Still following our original assumption, the foregoing analysis should be of some service as a guide to the legal instruction of accounting students.

In a paper read recently before the New York Society of Certified Public Accountants, Mr. Norman E. Webster, a member of the New York State Board of Examiners, suggested that the candidate for the Certified Public Accountant certificate in New York, should be acquainted with the following phases of commercial law.

1. The principles of common law and of New York and United States statutory law relating to
   (a) The forms of organizations, both those engaged in private and public business.
   (b) The relationships of such organizations to other.
   (c) The classes of property and of rights in property.
   (d) Other matters relating to business transactions.
2. United States and New York tax laws.
3. The rules of statutory construction of tax laws and of the extent to which administrative regulations in such matters are controlling.
4. The forms of procedure which are prescribed for the preparation of accounts for presentation to Courts or other agencies created by law, and the basic rules governing the submission of the facts as proof of allegations.
5. The legal responsibilities of those engaged in the public practice of accounting.

It would appear that legal training covering all points expressed or implied above would be adequate for most public accounting examinations.

But we have never held, I believe, that state examinations for public accounting nor even those of the American Institute of Accountants, are perfect. It is not the general practice, I take it, to point all accounting training toward success in these examinations, on the theory that such training is the best possible preparation for actual accounting practice. If this be true, may we not question the wisdom of directing the legal training of the accountant entirely, or even primarily, according to the law section of these examinations?

A more direct procedure (in the planning of the legal training of the accounting student) involves an analysis of the work of the practicing accountant, with a view to determining what he needs to know about law in order that he may do his work successfully. Therefore, in the preparation of this discus-

sion I have interviewed on this subject a number of outstanding accountants and a corresponding number of lawyers; I have secured their opinions as to the type of legal questions most frequently encountered by the practicing accountant and in what connection they most frequently occur. The balance of this paper is an analysis and a summary of the views expressed by these professional men, flavored, perhaps, with my own thinking on the matter, and influenced by current literature on the subject.

In the first place, according to the public accountants and lawyers interviewed, the accountant cannot hope to become familiar with the details of statutory legislation and governmental regulations on all subjects. He should study primarily fundamental legal principles, for these are fairly constant in nature; the details are continually changing and their intensive study would only hinder the accountant's advancement in his own profession.

The second point stressed in these interviews is that an accountant should not give *legal* advice to his client; as stated previously, the accountant's legal training will enable him to uncover points of law to determine when legal advice is needed, and at such times he should advise his client to consult a lawyer. Several years ago a final examination given to graduating nurses included a question something like this: there was given first a detailed description of a patient's condition, followed by this query, "what would you prescribe for this patient"? The correct answer to this question—and the only acceptable answer—was to the effect that a nurse should not diagnose a patient's condition and prescribe remedies or treatments, for that is the function of the physician. Similarly, legal advice is the function of the lawyer—not of the accountant.

A few accountants interviewed voiced considerable opposition to the foregoing opinion—that the primary demand for the accountant's knowledge of law is based on the fact that he must appreciate the value of the services of the lawyer. It was their contention that the accountant should know the substantial contents of fundamental statutes, and should even know the important decisions on a financial point on which he is consulted; therefore, he should be able to settle minor points of law without an attorney. This contention implies some familiarity with the technique of searching statutes and decisions for all relevant materials on specific issues—a technique not developed adequately enough for this purpose in most business law courses. The logical conclusion is that the acquisition of this type of legal training demands more formal instruction in law than our schools of business commonly offer. But even if this type of training were acquired, the accountant as a rule lacks the office and library facilities necessary for passing final judgment on questions of law.

Even with fairly comprehensive training in the fundamental principles of the law, an accountant is in danger of making a decision based on the "equities" apparent in the situation and of neglecting important statutory interpretations. Indeed, his knowledge of accounting enables him, in many cases, to discern more quickly than the lawyer what the equitable decision would be and he may forget that laws are often written in such a way as to secure exactness even at the risk of possible inequity.

For example, in the administration of trust estates, the application of the various state laws governing distribution between principal and income frequently result in inequity to one or the other of the parties concerned; in many cases a distribution based on sound accounting principles would be far more equitable—would accomplish far better the purposes of the creator of the trust. But the accountant engaged in such matters must follow the law—even when inequity results—and unless he has the specialized legal training demanded, he should engage (or advise his client to engage) the services of an attorney.

There seemed to be some opinion to the effect that in a very few specialized fields there are distinct opportunities for simultaneous practice of law and accounting. The best of these opportunities lie in various fields of taxation and in the handling of

trusts and receiverships. In this city for instance, there are several outstanding examples of this type of practice. In many cases the individual engaging in joint practice has been admitted to the bar and also holds a Certified Public Accountant's certificate; in other cases one or the other of these formal qualifications is lacking. It would seem that accounting students who display a special interest in and aptitude for the legal aspects of business problems should be encouraged to consider the opportunities in this dual field and to secure the necessary legal training to engage in it. In such joint practice, however, even in these highly specialized fields, there is the distinct probability that one or the other of the two professions will become the major one.

In much of the recent financial litigation public accountants have been the most important witnesses. An analysis of the court proceedings in these cases brings clearly to light two outstanding facts. The first is that a lawyer without a knowledge of accounting is not highly successful in "leading" the evidence of an accountant on the witness stand, nor in cross-examining a similar witness of the opposition. Equally outstanding is the fact that many accountants know too little about the law to be satisfactory witnesses. In some cases they fail to appreciate what type of accounting records are admissible as evidence. In other cases they neglect to give the attorney the necessary accounting information to serve both as a frame-work on which to construct his own argument and as a basis for the cross-examination of opposing witnesses. Furthermore, the accountant must, in many cases, guide the attorney in the use of various accounting records and documents which are to be used as evidence.

It must be remembered, of course, that the accountant as a witness must tell the truth; his whole attitude towards the case is different from that of the lawyer, who is interested in bringing to light only such evidence as is favorable to the cause of his client. This holds true both in cases where the accountant is an "expert" witness and is giving an opinion, and in cases where he is testifying to facts.

In a report presented in 1933 to the Essex County (New Jersey) Bar Association by a joint committee of lawyers and accountants, the following were noted as examples of activities requiring the services of both accountants and lawyers:

1. Planning the type of legal entity to conduct new business, having in mind the subject of Federal, State and Municipal taxes.
2. Upon incorporation of businesses, the opening of books of account and installation of accounting systems.
3. Problems involved in the consolidation, merger and reorganization of corporations.
4. Problems involved in the dissolution of partnerships and corporations.
5. Preparing accountings and cost systems in connection with the Federal Securities Act and with the National Industrial Recovery Act.
6. Determination of extent of damages and profits in patent and other infringement suits.
7. Public Utility rate cases.
8. Determining losses covered by fire insurance policies and preparation of proof of claim.
9. Matters arising in receivership and bankruptcy cases, including examination of books and records of the bankrupt and an analysis of financial statements.
10. Determination of rights of life tenant and remainderman, especially with regard to distribution of corporate dividends.
11. Income tax matters, including presentation of cases before the Commissioner of Internal Revenue and before the United States Board of Tax Appeals.

To the foregoing list of "coöperative" activities may be added others suggested by the lawyers and public accountants who have expressed opinions on this matter. Their suggestions include the following:

1. The preparation or interpretation of lease contracts, particularly where valuation of property or the determination of income is involved, or where there are lease security deposits.
2. Problems relating to the declaration of dividends.
3. The preparation of documents creating trusts, either living or testamentary.

4. Preparation of evidence for presentation in court where accounting records constitute an important part of the evidence.
5. The preparation of uniform legislation, particularly where it affects the interpretation of such terms as surplus, earned surplus, capital surplus, stated capital, dividends, insolvency and many other matters which relate to both accounting and law.
6. In some cases, the determination of the existence of (and the probable amount of) contingent liabilities.
7. In some unusual cases, the proper valuation (and showing) of certain balance sheet items.

There are undoubtedly many other points at which lawyers and accountants unite their activities in the endeavor to render to clients a service which is complete and adequate for the specific purpose at hand. However, the examples listed above constitute a fair sample, and in themselves offer substantial proof of the necessity of coöperation between these two great professions. Furthermore, they give some indication of the type of legal training useful to an accountant.

For many years frequent reference has been made to the increasing complexity of business. During the past two years additional legislation and governmental regulation have still further complicated the problem of business activity. In many cases there are few or no guiding precedents, and forward steps must be very carefully planned and executed. Mistakes can be avoided only if advantage is taken of all available sources of information. The combined judgments of accountant, lawyer and client afford little enough assurance against errors of policy or procedure. The value of the accountant, in connection with these joint decisions, will be materially increased if he has been trained to appreciate their legal as well as the financial implications.

Accounting principles have long served as nonlegal precedents for statutory legislation and court decisions on financial and business matters. The legally trained accountant is in a peculiarly strategic position to exercise his influence in hastening this evolutionary process. By so doing he performs a distinctive social service, for many of the inequities referred to earlier will disappear as still more of our fundamental accounting principles are embodied in formal legislation and legal precedent.

PACIOLI

R. Emmett Taylor

It is a fascinating study to investigate the life of a person who lived over four hundred years ago. In this instance it consists of fitting together scattered and elusive facts gathered in many countries and in various languages. It includes the presentation of a background before which life was led. It is difficult to understand the life without a clear conception of the background. This is the case especially of one who was so typically a man of his time. Such a man was Pacioli.

At the middle of the fifteenth century there was much political discord in Italy. The dissension which had existed for years while different families sought to establish themselves permanently within their respective duchies had in a measure subsided, but the alliances between the families and the cities and the duchies shifted whenever a political or economic advantage presented itself. Thus the layman must have been well versed in politics indeed if he could align at any one time the forces of Urbino, Venice, Florence, Pisa, Genoa, Milan or Naples. The Popes of the latter half of the fifteenth century dominated not only in religious matters, but they took a firm stand also in the politics of the times, and it was not beyond their province if need be actually to take to the field in matters military if it were a question of protecting their territorial boundaries. So great was the ill will between the various groups within the peninsula itself, and so little was the spirit of national unity, that on one occasion at least the Duke of Milan invited the French to come into Italy and to participate in the conflict. The French accepted the invitation with eagerness but they showed lack of good breeding and manners for they stayed too long or came too often. Some of the cities went so far as to extend a like invitation to the Turks with similar results. The Turks, not content to take over the trade routes and outlying provinces of Venice, came thundering almost to the city itself.

But there were occasional lulls in the military strifes so that the rulers were able to go home and rebuild their palaces and cities, and to set up a court life about themselves such as to win the admiration of the whole of Europe. Two of these were the Court of Urbino and the Court of Milan. In quiet times the merchants could trade more or less unmolested whether they shipped their goods from port to port or whether they carried them from city to city on land. The leadership in trading matters was usually held by Venice.

These were the conditions in Italy in the fifteenth century. Such conditions existed around the small town of Borgo San Sepolchro in east-central Italy. Pacioli was born in this village shortly before the middle of the century.

The boy came of a middle class family. When young he was taken into the family of another citizen of the town as was customary then with many youngsters who showed promise. This family may have been instrumental in directing to Pacioli the attention of a townsman Pietro della Francesca who was one of the greatest painters of that time and whose works have come down through the centuries as the finest in some respects that have ever been painted. Pacioli may never have been a student of Pietro in the formal sense of the word but he learned a great deal from him in painting, in mathematics, and in the newly applied science of perspective which the master was using in his work and about which Pietro wrote a book.

A number of young men about Pacioli's age were studying painting and perspective under Pietro. Some of these became almost as famous in painting as their master. Pacioli showed such proficiency in his mathematics that he outdistanced his master. Pietro had ready access to the nearby Court of Urbino, so he was able to make available to the young student the court library which was at that time and for years after perhaps

the finest library in the world. In that library Pacioli could find many of the old writings upon which he later based his compilations.

Then, when scarcely twenty years of age, Pacioli went to Venice where he became the tutor of the three sons of a rich Jewish merchant. This move was probably made at the instance of Pietro who had a wide acquaintance. That the family was Jewish seems certain because they lived in the Giudecca, that strip of land across the Grand Canal where many Jews lived in the middle ages.

Pacioli learned a very great deal living in the household of this family. He remained with them for about six years. Many tutors in those days were treated as ordinary servants, but this could not have been the case with Pacioli because he stayed with them so long, and because, at a later time, he dedicated his first book on mathematics to his three former students.

Venice must have been an exciting town in those days for the young man from the small town. It must have been an exciting place for another very important reason: The Turks but lately had captured Constantinople! What a chatter there must have been in the Rialto as the merchants talked about their interests on the exchange; in the Piazza beside the canal where the ships were tied up when they should have been on the high seas India bound; in the house of the Rompiasi with Pacioli and the three sons listening to the troubles of the Venetian merchant!

There must have been worries enough for Pacioli to know what to teach his students and where to get the material. There were his notes on mathematics which he had taken from the manuscripts in the Urbino library. There were many trips to Urbino to gather more notes in the course of his six years in Venice. But Urbino was more distant than a week end from Venice, and a poor student must walk or remain at home. There was a limit also to the amount of mathematics that were necessary for the sons of the merchant. The practices in trade and commerce might be even more helpful to the young men, and no city in the world could supply such information as well as Venice.

The business relationships of this period in Venice may be divided into trade and commerce. The various trades were incorporated into gilds for the purpose of common protection and common fellowship. There are as many as forty-five trades listed, and though a person notes some few missing these may have been contained within the others. Chief among the gilds were the carpenters, glass makers, masons, merchants, painters, and cloth weavers.

The commerce of the Venetians was maritime, river or inland, and carrying. For centuries the trade relationships with distant countries had been placed on a sound basis though they were disturbed occasionally when transactions with the Mohammedans were inhibited, and when the Turks became more and more obstreperous. The river or inland commerce developed early, and the trade advantages were augmented by means of treaties with the various powers of the peninsula often giving the Venetians preference. In the carrying trade the Venetians eventually became the leading carriers of the world. The trade became regular with France, Spain, Portugal, Granada, Egypt, Cyprus, Greece, and even India, and more or less regular with lands as far away as Britain.

The traders and merchants in Venice had an orderly method of keeping books. The method pertained to debit and credit. The merchants in many other cities were orderly also in keeping records of their transactions, but Venice had the advantage because there the merchants had kept their books in this fashion for over two hundred years. In Venice it would be an easy matter for Pacioli to go into the shops and study the bookkeeping methods first hand. He could examine the accounts of the traders. He could look into the records of the city itself because many of the cities of Italy were keeping their activities in order by the use of bookkeeping. In the records could be found among other data the deposits of sums of money with the city, payment to be made dependent upon some contingency. There were private

banks also where money could be deposited or borrowed at interest.

In the examination of all of these records of trade and commerce, Pacioli must have been struck with the use of the Roman Numerals and their impediment to good bookkeeping. It would be obvious to him at once that the Arabic numerals would facilitate matters. He was certainly impressed with the various kinds of money used not only in the Venetian province itself, but throughout Italy and the world. In time he sought to simplify the problem by a comparative study of the monies of the duchies and provinces of Italy.

All of Pacioli's time in Venice was not devoted to examining the ways of merchants or in tutoring the three young men. There were in the city competent teachers of mathematics under whom Pacioli enrolled. He was busy making friends with some of his classmates who were to be helpful to him later on. He was not to forget his earlier religious training and the fact that he was born and raised not many miles from Assisi. He would attend mass in the many churches of Venice and study in the libraries of any Franciscan monastery within the confines of the city or the surrounding area.

Then came again the gentle guidance of the old master Pietro. During the supremacy of Pope Paul II, Pacioli went to Rome to live with the celebrated architect Alberti who was a personal friend of the great painter. This was in the years 1470–71 which could make Pacioli not over twenty-five years of age. What an experience to live in the house of the aristocratic Alberti, the great architect, the great scholar, the great athlete. In this house Pacioli learned many things about architecture from Alberti and from his book on the subject. In Rome at this time Pacioli definitely must have made up his mind to take a step he long had contemplated. He joined the religious order of the Franciscans Minor. The passing of Alberti in 1471 may have hastened Pacioli in this move, but Pacioli himself says that he went into the religious order in "accordance with a vow" he had taken. It was not uncommon during the medieval centuries and the Renaissance for men of promise to take orders if they hoped for advancement as teachers or writers. A move of this sort would secure for Pacioli the backing of a strong religious order and the church. It would enable him to further his education. It would assure him of teaching positions which afforded remuneration to him. It would enable him to travel from place to place at little cost. Most of all a religious man could go about more or less without molestation during years of political and military strife. But Pacioli sought the religious life also because he was naturally a religious man. Throughout his whole life he endeavored to put into effect the teachings and doctrines of St. Francis. Two of Pacioli's brothers and two of his nephews became monks, though some of the other members of his family leaned to the soldiers' life.

But it is uncertain what Pacioli was doing from 1471 to 1475. There is evidence that he was in Naples teaching privately. If this be the case he may have been teaching Euclid. There is evidence also that he was in business there, but whether he was in business for himself, working for others, or merely studying business practices for his own edification is not established. If these conjectures be correct, the time during which Pacioli joined the Franciscans Minor would be from 1475 to 1477, because, as a monk, he went to teach mathematics in the University of Perugia in 1477. These facts are of some importance because Pacioli would see early that to teach privately and successfully would be difficult for a poorly trained, inexperienced, immature young man who was not sponsored by a strong centralized institution. That joining the Franciscans Minor bore fruit soon by way of advancement is evident because he got the position at Perugia by their intercession. That the Order prevailed upon him to stay with his teaching in his early years is shown by the fact that on one occasion he was ordered to return to his work under threat of excommunication if he disobeyed. He obeyed. In three months he asked for a raise in salary which showed his business acumen. He got the raise because of the fine

life he was leading, because of his studiousness, and because the University felt that he needed more money to live as befitted his position. He stayed at Perugia for three years on this occasion.

The years from 1480 to 1486 were wandering years. In 1481 he was teaching at Zara in Dalmatia, which was the only time for a surety that we know he was outside of the peninsula proper. The year following, Pacioli was in Rome lecturing on mathematics. There is reason to believe that Pacioli traveled much before 1486. If so he may have been among the Moors because his mathematics show a strong Moorish tinge rather than the direct Grecian influence. But this influence may be attributed to Leonardo da Pisa who introduced Moorish mathematics into Europe in 1202 and from whom Pacioli drew freely. Also, during those years, Pacioli must have got a University education because in 1486 he was back in Perugia with the title of Master. Pacioli's first sojourn at Perugia may have convinced him of his need for travel and study and so he sought at once to make up his deficiencies.

This stay at Perugia was shorter, however, because after a year he went to teach for two years at the Sapienza in Rome, and then for three years he lectured at the Academy in Naples. In the year 1494 Pacioli published his Summa in Venice.

Pacioli was writing his Summa probably over a period of thirty years, that is from the time he first went to Venice. The main task of a teacher in those days of unprinted manuscripts was to supply the teaching material. Therefore, when he had covered his material in the lecture room there was nothing more to say, so he had the good judgment to stop, and to seek a chance to repeat his lectures in another University. Pacioli endeavored to make his writings available to teachers and students by means of the newly devised printing press. In 1494 printing had been in use in Italy for some twenty years, but scarcely anything other than the classics had been printed. Earlier there had been a printing of Euclid, but Pacioli's Summa was certainly one of the very early books on mathematics to be printed.

The obstacles confronting Pacioli must have been great. There was the prejudice against the printed book. This was so great that one of the Dukes of Urbino who certainly was a most enlightened man refused to allow a printed copy in his library. Most of the books were in Latin. Latin was understood mainly by the higher classes. Pacioli wanted to get his mathematics into the hands of the people. He wanted them to apply mathematics to everyday life. If he wrote in the language of the people he would be sneered at by the learned. He used a combination of the Latin and the Italian of the time. It is impossible for the modern student to translate the Summa unless he knows both the Latin and the Italian.

The Summa is by no means an original book. It is a compilation of many subjects all more or less related to mathematics. Pacioli himself is the first to admit that he collected the material from many sources and he names the various authors. In one place he states that when he does not specifically name the author it is to be understood the material comes from one certain author. These remarks are necessary because Pacioli has been accused of plagiarism, but the allegations have been disproved. Pacioli has been condemned also because of his atrocious Latin and Italian. Measured by present-day standards, there are bases for the criticism, but Pacioli was not attempting to write in the Latin of Vergil; modern Italian was then in its incipiency. Pacioli was writing in church Latin, and in an Italian dialect used mainly in the Duchy of Urbino. The translator will be more charitable to Pacioli if he recognizes the problems besetting the author of the Summa.

The Summa contains the material on double-entry bookkeeping. At no place does Pacioli claim originality for the system. He specifically states that he is merely writing down the system which had been used in Venice for over two hundred years. The material on bookkeeping is divided into thirty-six short chapters. It treats of the memorandum book, the journal, and the

ledger. It explains the system of debit and credit, how the transactions should be recorded, and the practices of merchants. That Pacioli must have kept books himself is evident from his chapters on posting where he insists that the task must be performed with the utmost accuracy. In great measure the material is theoretical as compared to ours, but what it loses by way of problems it gains by way of pithy statements as a guide to exactness. He repeatedly emphasizes that "every action must be determined by the end in view." That "where there is no order there is confusion." That "he who does nothing makes no mistakes; who makes no mistakes learns nothing." The chapters are not without religious admonitions: "Remember God and your neighbor"; "by being charitable you will not lose your riches." When he speaks of losses he prays that from them, God may keep every one who really lives as a good Christian!

The Summa attracted much attention in Italy. It caught the eye of Lodovico, Duke of Milan who invited Pacioli to come to his Court.

Pacioli went to the Court of Milan in 1496 to teach mathematics at the University. In Milan he had an opportunity to associate with famous doctors, lawyers, architects, and painters. Among the last was Leonardo da Vinci who "had no use for monks." These two became close friends. They lived only a few squares from each other near the Castle. Pacioli would drop in often at the Convent to watch Leonardo work on the "Last Supper," and he would help Leonardo calculate the amount of bronze for the equestrian statue the sculptor was doing for the Duke, though the statue was never to be finished. Leonardo learned his "roots" from Pacioli, and perhaps Pacioli carried over from his old master Pietro della Francesca to Leonardo the knowledge of perspective evidenced in the great painting. Pacioli was writing a new book to be called the Divina. Leonardo would do some of the drawings for the book.

At the turn of the century the French captured Milan. They drove the Court out before them. Leonardo and Pacioli departed for Venice but they stopped off at Mantua. Pacioli was to dedicate his book of "games" to the Duke and Duchess of Mantua. This book seems to be no longer in existence. It was mainly about chess and it was spoken of as a "humorous" book.

The stay of these two men in Mantua and Venice was brief because in the year 1500 they were in Florence where they were to be much together for the following six years. Meanwhile Pacioli taught at the Universities of Florence, Pisa, and Bologna. It must have been deep gratification to Pacioli to teach at Bologna, "the greatest of the Universities." A few years of public lectures in Rome and Venice followed, and then, in 1509, Pacioli was in the latter city again working day and night on the publication of the Divina, and his revision of Euclid.

At this time Pacioli must have been in his early sixties. His remark in a letter at the time of the publication of the Divina to the effect that he had been working with mathematics for forty years, and the statement elsewhere that he went first to Venice when scarcely twenty years of age, justify the conclusion that he was born between 1445 and 1450 though one of his biographers states definitely that 1450 was the year. A tone of resignation runs through the letter. It indicates a desire to rest after many years of arduous labors. It was at this time that he became the head of the convent of his native town of Borgo San Sepolchro where he could play at his favorite game of chess and reflect about the events of a very active life. But his administration of the convent affairs was not without its problems. There was dissension between him and some of the monks under his authority to such an extent that the issues on at least two occasions were brought before their superiors. But in 1514 Pacioli was called by Pope Leo X to teach at the academy in Rome.

The year 1514 is the last definite date we have about Pacioli. Earlier writers believed that the man may have died shortly after 1509 as he completed the publication of the Divina in Venice. Many references to his life between 1509 and 1514 are now available. Indeed, there is some reason to believe

that he may have lived until 1523 at the time of the publication of the second edition of his Summa. The title page to this edition gives some basis for this conclusion.

It is perhaps impossible to overemphasize the influence of Pacioli. One who attempts to trace the history of bookkeeping and its development can see the influence of Pacioli in the German writers, the Dutch writers, the English writers, and in ourselves. He was to carry over in a century dull and listless in mathematics. Those who trace their mathematics are likely to stop at Gardan and Tartaglia but they need go only one step further to Pacioli. Pacioli was typically of the Renaissance. He knew business, mathematics, teaching, religion, writing, architecture, sculpture, painting, military science, medicine, and music. His great aim was to diffuse knowledge and apply it. Such a restless, ambitious, energetic individual breaking loose from the bonds of the medieval ages!

There is a painting of Pacioli in the museum in Naples. It was done by an obscure artist very little known in modern times. Pacioli is standing back of a table upon which are placed books and mathematical implements. At his left stands one of the Dukes or Urbino. Pacioli is in the garb of his Order with the cowl on his head. Pacioli is shorter than the Duke but he appears to be of medium height and weight. He has a round face and a determined chin. There is a twinkle in his eyes. He has his left hand resting on a page of an open book which some have taken for the Summa. It is probably a printed copy of Euclid. A pointer in his right hand rests upon a slate on which the figure of a divided circle is drawn. There is a crystal globe suspended above the table at the right. The painting is sometimes called: "A Demonstration in Mathematics."

Pacioli was universally well liked as a great number of his friends and associates in every walk of life have attested. Many of his students who later became famous recalled him with affection. One wrote that on an occasion of overzealousness, Pacioli rebuked him with: "Oh you want to know too much!" Another wrote that Pacioli advised him about teaching: "You have to learn to tell a thousand holy lies." Many students of the period attributed their success in mathematics and kindred subjects to Pacioli and his Summa.

It should not be imagined that the sources about Pacioli are plentiful. One is led to believe that only two of his books are now in existence. These are the Summa and the Divina. There were two editions of the Summa, the first published in 1494 and the second published in 1523. There are copies of both of these editions in the United States.[1] What appears to be the only copy of the Divina is in the city library in Geneva. Sections from the Divina are to be found in this country. Other than the original books, the best approach to Pacioli is through the histories of mathematics, but the histories give very little information about the man's life. The best sources of his life are his own publications and the records of the universities and towns in Italy where he taught and lived. Pacioli's biographer, the Italian Baldi, writing about one hundred years later appears largely to have used the Summa; German biographers of a later date resorted to the Divina. None of the biographers seems to have had both of the books for reference purposes. The threads of his life must be picked up in many places. It is to be hoped that further investigation will round out the life of Pacioli more completely.

[1] The writer is grateful to the Newberry Library of Chicago for the use of the earlier edition; to the library of the University of Michigan for the later edition. Michigan has also the earlier edition.

SOME REFLECTIONS OF THE SCOPE OF AUDITING

Daniel Borth and Arthur H. Winakor

With the growing conscious recognition of the importance of financial data in the ordering of everyday business and economic life, the need of basic economic facts is providing a constantly enlarging opportunity for the accounting profession. The auditors' reports have an especial capacity to fulfill the need for reliable and authoritative financial material not only because of the past reputation or prestige of the certified statements, but also because of the significance generally attached by the business man to the functions of the auditor and his reports. These functions, and the scope of these reports, have in the past been definitely related to the character of and changes in business activity.

The early conceptions of the functions of the auditor were such as to confine him to the duties of a mere checker and verifier of debits and credits. As business became more complex in its interrelationships there has been a compensating broadening demand for the acceptance of new and formerly unrecognized responsibilities by the auditor. This has progressed so far that the highest type of auditor is looked upon today as a financial expert. The premises upon which most audits are predicated, however, are still largely those of the checker-verifier.

Recent economic trends have accentuated the new conceptions and demands upon the auditor. The control of business enterprises within and among themselves has emphasized the importance of the budgetary and managerial aspects of the accountants' reports in enabling business units to coordinate their internal and external activities in the scheme of the economic plan. It must be confessed that most auditing textbooks fail to see the auditor as the unconscious determinant of basic economic data—essential to the formulation of social, corporate, and individual financial policies.[1]

In substantial unanimity, the auditing and accounting books have failed to recognize this enhanced scope and the changed functions as well as opportunities. Instead, they have stressed the rigid procedural rules of auditing with adherence to formalized routine—they have failed consciously to recognize auditing in its proper perspective and interdependence with other fields. The acceptance of this point of view would lead one to conclude that auditing procedure can be segregated from economics, finance, engineering, law, and other related sciences. Although it is possible in the academic mind to create a dichotomous classification whereby audit procedure is abstracted from its related fields, such as has been done in many auditing books, in the experience of the writers this is neither feasible nor practical.

After all, the principles of auditing are partially adaptations from other fields; they are practices from other fields which it has been found feasible to incorporate into auditing procedure and routine, in the attempt to approach as closely as possible to a realistic presentation of dynamic facts. The considerations and decisions upon which the routine is based and the interpretations of these results of auditing routine, are far more important than the routine itself in the significance and value of the results.[2]

If the above generalizations are essentially valid, the successful auditor of the future will be the one who can grasp these inter-

[1] E. L. Kohler, Editor of the Accounting Review, would have "the accountant recognize his duties as a social scientist—." The Accounting Review, Dec. 1932, page 305.

As Burtchett, F. F. in his *Corporation Finance* states "The Accountant has been called the economist's 'doorkeeper' . . . i.e., what the accountant permits to pass to the public in the form of data concerning the status and operations of individual enterprises constitutes the material upon which the economist performs his feat of induction by the quantitative method." p. 506.

[2] In view of the great preponderance of time which is consumed by routine procedure in most audits, it would not be surprising to the writers to find most auditors differing with this statement.

relationships and see them in their proper perspective. He will be one who is capable of blending these tools obtained from other fields, into his reports in such a way as to interpret and appraise the whole. In view of the nature of his work, and with an adequate background, such an auditor should be more capable of interpreting his own work, and incorporating intelligently the findings of other fields. This type of auditor will approach a true financial analyst such as we conceive the auditor of the future.[3]

These changes in the opportunities and nature of the auditor's work have not been unrecognized.[4] It is questionable, however, from a survey of auditing books and views expressed by practitioners and teachers whether they have completely grasped the situation. In spite of the views advanced by the leaders in the profession, practitioners as well as teachers have failed to readapt their procedure and technique and have failed to incorporate the broadened viewpoints and principles. The older and narrower functions of auditing still predominate and the students are still being trained fundamentally in the older viewpoints. The audit reports are still couched in traditional stilted style, with strikingly inexplicable financial statements, and woefully lacking in what might rightly be considered intelligent and essential interpretation.

Many of the so-called "accepted" principles of accounting are in themselves so debatable and indeterminable, that it seems almost indefensible that the typical financial statement, or even auditing report, should state "one of the facts" rather than "the several facts."[4a] The more that one realizes the interrelationships of auditing and accounting with other fields, the more certain one is that an adequate presentation of financial data cannot be achieved by a statement of the valuations preferred or imputed by the particular auditor or follower of a specific firm. The modern auditing report fails to recognize that after all, the value of the material which is presented, is definitely dependent upon the premises and principles which have governed the procedure of the audit.[5]

One may well wonder why this narrow viewpoint of auditing is prevalent. Some would probably attribute it to the continuation of the traditions of the past. Some would perhaps attribute it to the too close adherence of the writers of auditing texts and of the teachers of auditing to the procedural aspects and to the survival of historical methods. Although there may be ample justification for certain books which have confined themselves exclusively to auditing procedure, yet this would not justify the exclusion of supplementary material or books emphasizing the policies and principles underlying and determining the procedural results.

A review of the accepted auditing textbooks reveals how little they really suggest, and how much less they assist the student in the solution of specific problems. Although some of the auditing books suggest the relationships of these other fields and of the principles which must be drawn from them, few of them go so far as to discuss these and too few refer the student to other sources where he may go to find this needed information.[6]

In order to give materiality to some of the general statements which have been made in the foregoing paragraphs, the immediately following pages are devoted to a discussion which is indicative of a few of the broader aspects of certain auditing viewpoints found strikingly inadequate. No attempt has been made to present an exhaustive survey of such problems, nor of all those that are important.

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[3] For a criticism of the tendency toward the all-inclusiveness of the accountant, see *Incorporated Accountants Journal*, Feb., 1928, p. 160 ff. Richard Kolb would see the public accountant as the future economist. See *Certified Public Accountant*, May, 1934, p. 274.

[4] See especially, Daines, H. C., "The Changing Objective of Accounting," Accounting Review, June, 1929, pp. 96–110; Scott, D. R., *The Cultural Significance of Accounts*. (N. Y., Henry Holt & Co. 1931.)

[4a] Canning, J. B., *The Economics of Accounting*, Ronald Press Co., N. Y., 1929, pp. 203–204.

[5] W. A. Paton in "Shortcomings in Present-Day Financial Statements," *Journal of Accountancy*, Feb., 1934, pp. 108–132 takes the more orthodox critical approach to the needs of the profession.

[6] Winakor, A. H. and Borth, Daniel, "Documentation in Accounting Literature," Accounting Review, March, 1934, pp. 60–68.

One does not need to search very far for things to criticize, nor for suggestions by way of remedy. The item which generally appears first on financial statements may well be analyzed. "Cash" is one of the few items regarding which the accountant does not ordinarily feel called upon to exercise any great amount of judgment in determining values. Beyond the ascertainment that the correct sum is free and available at the corporation's command in the bank, and after making adjustments for items in transit, checks issued subject to the bank statement, and the like, the problems are not serious.

With the exception of the inventories, the entire current assets are predicated upon a debtor-creditor relationship. That is, each item in the current assets, with the exception of inventories (and a small amount of day to day cash on hand) represents an intangible promise of some other corporation or some individual to pay.

These promises vary according to contract. Cash is usually, although not necessarily, a promise to pay on demand. Receivables are promises to pay under perhaps widely varying terms and conditions. Some receivables, those which fall due in the day's business may even be safer and sounder current assets than the "cash" itself. The account of a large corporation, with ample cash resources both in bank and marketable securities, representing sums due for purchases of materials, may well be a sounder current asset, and even more immediately available, than the "cash" asset of a small enterprise doing its banking with one or perhaps two local depositories.[7]

The accountant could not evade his responsibility if he failed properly to age and evaluate the accounts receivable, but in general he incurs no responsibility by his failure to value the real worth of the item "cash" so long as the depository happens to be open on the date of the audit. One may readily realize how foolish this procedure is when he considers how many banks in this country have closed during the past decade. Nor were they all small.

Naturally, the accountant may incur some serious criticism, or even opposition, should he attempt to do what is here suggested, recognize "cash" as a receivable, and value it in accordance with sound balance sheet theory. The auditor should take the added responsibility of valuing the item "cash" just as he does other balance sheet items. If he is unwilling or unable to do so, he should state the fact. In the case of the large corporation with numerous depositories, it is possible to set up reserves based upon experience and judgment. In the case of the small enterprise it is much more difficult to do so, but here it is even more important, since failure of *the* depository may wreck the enterprise.[8]

The item of inventories has provided many a knot in accounting. These problems are too well known and recognized to need further comment here. They merely show the inadequacy of such an item as "inventories" in the balance sheet without some important qualifications or discussions in the audit report which must accompany it, regarding the bases and principles of valuation.[9] The recent rapid economic changes have raised or accentuated other aspects of inventory valuation, which have hitherto remained dormant, although not absent in the past, or likely to be absent in the future.

[7] In fact, some industrial corporations found it necessary and expedient to enter the banking business and provide capital to establish banks to protect their employees' deposits, their business transactions, and in other ways came to the rescue of the banks. One needs only to mention Sears Roebuck & Co., Standard Oil of Indiana, Chrysler and General Motors.

[8] Nor do these considerations have a mere academic value at this time, as some readers may at first thought assume. The guarantee of bank deposits is not likely to prove a cure-all, its future is as yet indeterminate. Even though no unexpected difficulties arise in the future operations of bank deposit guarantee, it must be remembered that the new deposit corporation does not undertake to "insure" all deposits of unlimited amount. Corporations will not be protected unlimitedly against losses of "cash" balances, but in the future, just as in the past, must continue to exercise judgment and care to avoid losses from this source. No authority in the field of money and banking would be so bold as to declare that we will not have bank failures in the future, or that we will not even have numerous failures in the future, under our existing system of banking. Obviously there is and will be room for the accountant to exercise judgment.

[9] Chapter XI of *The Economics of Accounting* by J. B. Canning contains thoughts along this line.

By way of illustration of one problem which has evidently received inadequate attention, it may be mentioned that a recent study[10] showed that at the end of 1932 about 33 per cent of the inventory of department stores (on the basis of retail price) was more than one year old. This same study showed that in some departments most of the merchandise was more than a year old.[11]

The problem involved in this point is, of course, the determination of just what a current asset is,[12] and to what extent such inventories as those mentioned constitute a current asset. Ordinarily current assets are defined as those assets which will, in the ordinary course of business, be converted into cash within about a year's time. Accepting this definition, tentatively, for sake of argument, the question may be raised, as to whether the auditor of a department store could conscientiously accept such inventories as a current asset. Can he, even after reducing the value of the inventory to "present market value" include such items in current assets, or in the inventory item as such?[13]

Perhaps it may occur to the reader that there is more than one way of solving the problem. Doubtless, there is. Perhaps the auditor will accept the inventory as "current" after revising it to present values, irrespective of whether it may or may not be sold for two to five years. Perhaps he will decide that the whole question of "currentness" is problematical and largely dependent on economic conditions and simply set up a contingency reserve, or some other form of reserve from profits or from surplus. Neither of these practices appear fully justifiable. If the auditor is willing to accept such items as "current" inventories, he opens himself to the criticism of illogical and unreasonable procedure. If he is going to follow this procedure, and value old inventory assets at present values, and consider them "current," then he might as well go so far as to determine the "current" value of all other assets, including fixed assets, since they too can perhaps be sold within the current year "at a price."

It would seem as though the proper and "conservative" manner of presenting such an item would be to indicate that portion of it which is not current, or likely to be realized upon within the current year. That portion of inventories which is more than one year old should be so designated and set down with the "non-current" assets.[14]

Broader implications may be drawn regarding the policies of accountants and auditors in inventory valuations. It is quite plausible that the inventory of certain companies might become the fixed assets of others. But all too frequently the inventory as carried on the books of the producing company cannot be considered as current, since they are not realizable upon in a year's time. The writers are aware of cases in which

[10] *Performance of Department Stores*, E. H. Gault, Bureau of Business Research, University of Michigan, Vol. v, No. 3, p. 430.

[11] For example, the percentage of inventory more than one year old in selected departments was: Woolens, 40%; Laces, embroideries, and trimmings, 64%; Ribbons, 50%; Umbrellas, 81%; Gloves, 41%; Carpets, 59%; Rugs, 72%; Toys, 38%; and Stationery 44%.

[12] Borth, Daniel and Winakor, A. H., "An Analysis of Working Capital Position," *Certified Public Accountant*, May, 1933, pp. 268–272.

[13] It is obvious that large proportions of the 1932 and 1933 inventories could not have been considered goods which would be converted into cash in the ordinary course of business within one year. In fact, at the then existing rate of sales, it would have taken an average of two to five years (and perhaps more) to turn most of those departmental inventories into cash.

[14] An even more drastic and radical plan has been suggested by Gault, E. H., op. cit., p. 431. A discussion of inventory valuation as given states:

"The large amount of year-old merchandise in inventories will probably result in relatively large markdowns in 1933. For the same reason it is probable that stock-turn will be low. The age of merchandise figures indicate clearly that the stock-turn of 2.6 which was secured in 1932 was made possible only by a rapid stock-turn in the 49.6 per cent of the inventory less than six months old.

"One solution for the age of merchandise problem is to set a time limit for each department and to give no inventory value to merchandise which has been in stock longer than the time limit. This practice is followed by some of the variety chains, which give no value to merchandise recorded as having been in stock in the retail store for more than one fiscal-year inventory. . . ."

The failure to segregate these two portions of inventories results in an overstatement of current position. It overstates the actual current and working capital of the company. It is difficult, however, to see how an accountant could accede to this suggestion since it may understate assets. If the non-current inventories have a value, this should be recognized. Otherwise they should be removed from the shelves, saving rent, taxes, insurance, and the like.

inventories, as for instance stock of a stone cutting plant, even though carried at current or market values in accordance with ordinary accounting procedure, have not been liquidated for several years, nor could they have been sold, except perhaps at tremendous losses. An asset is not a current asset, unless there is a fair market in which it can be offered with a reasonable expectancy of being sold at a price as indicated by inventory valuations. Otherwise either the inventory valuation, or the classification of the asset as "current" (or both) is at fault.

Furthermore, the typical auditing text usually advocates that promotional and organization expenses should be written off the books the first year, preferably, or at least during the first five years of the company's life. So intent are these writers in suggesting ultra-conservatism that the financial and economic principles underlying the whole problem are forgotten or at least little discussed. And yet these considerations are essential to a well-grounded and rational approach to the auditor's treatment of these items. An understatement of factual data is quite as deceiving as over-statements, yet few accountants seem to be willing to admit it. Though understatements of certain economic data may be beneficial to one class of interests in the company, this same deliberate misstatement deceives and possibly injures the economic interests of other classes. It would seem that the accountant should face the facts squarely rather than advocate undue understatements of economic data and justify himself under the guise of orthodox principles. The presentation of a complete picture is to be preferred to an acquiescent reliance on one figure or method founded on a no more logical concept than that of "conservatism."

Many accountants object to capitalizing or retaining such values on the ground that they are intangible and indeterminate. Nevertheless, when one analyzes the whole orthodox method of ascertaining those items which are properly capitalizable, it appears that if the intangible values (all value is intangible) can be attached to some concrete and physical asset, then they are capitalizable into the cost of that asset and properly depreciable over the useful life of that physical asset. By way of example, mention is made of architect's fees, interest and taxes during construction, administrative expense, and the like, which are commonly accepted as a capitalizable cost of building, and given a long depreciable life. Considerable question may be raised as to why economic values expire less quickly where the "intangible" is attached to a physical asset than where it has no such ready adherence.[15]

The value of fixed assets which frequently loom large on the balance sheet, and which provide an important part of the auditor's work, has been a moot question in many accounting and financial discussions. This item, which is less determinate than almost any other item in the financial statement, materially influences the financial statements and results of operations.[16]

One finds many inconsistent and perhaps unsound practices closely connected with depreciation. Most accounting texts, although recognizing and presenting the various methods of determining depreciation, revert with little or no explanation for doing so, to the time-honored, albeit shopworn straight line method.[17] They do not consider which method will give the most accurate facts in valuation of fixed properties and results of operation, but apparently are influenced by the relative ease of calculation and understanding of the businessman.

Depreciation is largely an engineering problem if its purpose is to replace or maintain physical, capital goods—a financial problem if the purpose is to replace a capital fund.[18] Accepting for purposes of discussion, the orthodox principles of valuing fixed as-

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[15] It is to be noted that the writers are not concerned with non-purchased intangibles. On the latter subject, see, Yang, J. M. *Goodwill and Other Intangibles*, Ronald Press, pp. 113–182.

[16] The writers have purposely avoided discussion of the numerous methods and results of valuation of fixed assets other than depreciation policy.

[17] Canning, J. B., "A Certain Erratic Tendency in Accountants Income Procedure," *Econometrica*, Vol. 1, No. 1, (Jan. 1933) p. 52–62, especially pp. 56–61.

[18] The writers' desire to emphasize that they do not wish to raise any questions relative to appraisal values, but are placing the arguments on the accepted "cost" basis.

sets—namely original cost—it is, nevertheless, possible to raise some fundamental questions relative to the adequacy of book valuations. The present auditing procedure seems to be confused as to whether the fixed assets should be viewed as a fund or a specific physical asset. Because of this confusion, depreciation has been incorrectly viewed, and this has led to a misconception of the functions of depreciation in accounting practice.[19] The time honored straight-line method views "depreciation" as replacement of capital or investment, yet the strict acceptance of this view is belied by the fact that the probable service life of the physical asset is also considered.

This lack of a clear theoretical premise as to the basis of the depreciation charge may perhaps be ascribed to indefiniteness of the purpose of the depreciation charge in the mind of the average businessman. The concensus of accepted accounting authorities view the depreciation charge as the periodic decrease in the book value due to wear and tear and the passage of time. The purpose of this charge is to aid in arriving at the real costs. What the proper charge for depreciation should be will be dependent upon the accountant's idea of the function of the depreciation charge. If the purpose of "depreciation" is the replacement of the "capital fund," it would seem that the periodical charge might more properly be designated as "capital fund replacement expense" rather than as "depreciation expense" which more correctly implies an economic and engineering relationship to the physical asset.[20]

One need only look at the physical objects which are in every day usage, in the household, and in the factory, to see that there is no necessary close relationship between the wear, tear, and physical expiration, and the changes in book value which the accountant ordinarily records by the almost universally-used straight-line method.[21]

By way of illustration, two extremes may be mentioned, namely office furniture, and automobiles. With reasonable care, and under ordinary circumstances, the office furniture might be just as serviceable, and just as physically intact at the end of five years as at the date of purchase. On the other hand, in the case of the automobile the wear and tear element is a much more important factor than the time element in determining the depreciation. This is well recognized by the practice of many firms which annually estimate by an examination the expiration of the book value of their automotive equipment instead of using some of the more generally used and so-called more scientific methods.[22]

The more the plant and equipment of a concern is depreciable by the elements of wear and tear, the less likely the straight-line method of depreciation will provide an adequate charge to expense for the change in book value. With the growing employment of cost accounting systems in business, and with the increasing recognition of the fact that costs are one of the elements in determining selling price,[23] there is little or no reason for the blind adherence to the straight-line method.[24]

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[19] It is apparent in many cases that depreciation has become a mere charge to expense without any careful consideration of its relation to the problem of valuation and expense incidence.

[20] F. F. Burtchett in his *Corporation Finance*, p. 592 (footnote) indicates in a vivid fashion the various concepts of the depreciation charge.

[21] Cipriani, Alfred B., *Duties of the Junior Accountant*, American Institute Publishing Co., New York, 1933, pp. 115–116. Also see Olson, Lyle H., "What of the Appraiser?" ACCOUNTING REVIEW, Sept. 1932, p. 209; also Winakor, Arthur H., "Incidence of Expenses in Accounting," ACCOUNTING REVIEW, Vol. IX, No. 4, (December, 1934), pp. 312–318.

[22] Saliers in his book, *Depreciation-Principles and Application* (Ronald Press, 1922, p. 1932) says, "Speaking generally, there appears to be no reason why the straight-line method does not approximate actual depreciation as nearly as any of the complicated curves at times advocated, apparently on the assumption that actual depreciation finds a counterpart in the accuracy of their mathematical computations."

If such a contention is to be allowed to stand, one may question the theoretical and practical application of mathematics and mathematical formulae to every other field of science, as well as accounting. It must be pointed out, however, that Saliers relates methods of depreciation to the accumulation of a fund.

Surely, if the complicated formulae or complicated curve is based on operative experiences of large quantities of physical assets as determined by engineers, the above quotation may be wholly denied.

[23] See W. A. Paton, "Accounting Problems of the Depression," ACCOUNTING REVIEW, p. 265.

[24] The inconsistency of the accountant may be pointed out by citing the common practice of distributing of the annual charge to the product on the esti-

Although the straight-line method is still the most commonly used, some of the leaders in cost accounting have recognized its limitations, and have suggested the "units of production" method, that is, the estimating of the probable production of the service life of the machine, and proration to a particular year on ratio of the year's production to the total anticipated production.[25] It is admitted that this is a valiant attempt on the part of the accountant to achieve the distribution of the depreciation expense on a consumption basis instead of the straight-line method, but it is believed that the difficulties inherent in such an estimate are sufficient to destroy a very large part of its merit. Although it is possible in the case of short-lived properties to estimate with a fair degree of accuracy the probable productive units, the degree of accuracy declines with the increase in the life of the asset. The factor of obsolescence, not only in the machine, but in the product itself discredits this method in the great majority of the fixed properties.

The intimate relationships of depreciation, repairs, and betterments is seldom adequately treated in most books on accounting. Although the texts recognize the differentiation of capital and revenue expenditures, they fail to enter into the borderline cases involving in practice the great bulk of every day operations. The student is led to believe that these items are readily classified by the accountant from an examination of invoices, although nothing could be further from the truth. Here again, the accountant may well find it advisable (if not absolutely necessary) to rely upon the expert engineer's judgment even to approximate the facts.[26]

The problems of depreciation are further aggravated by the omnipresence of obsolescence. The older school of accountants believed that obsolescence was a factor foreign to depreciation, and sought to make separate provision for each in the accounts. More modern treatment of these problems, however, recognizes the inseparableness of depreciation and obsolescence, and it is not uncommon to find depreciation defined as including obsolescence.[27]

Although the preceding discussion is a wholly inadequate review of a few accounting and auditing principles and practices, it contains a sufficient variety of topics to provide the basis for inferences which may be employed to question some of the commonly accepted accounting and auditing principles and practices. One who surveys the accounting approach to these above mentioned topics is impressed by the extent to which the accountants employ maxims and principles founded on expediency, conservatism, and practical considerations—many aspects of which have become out-moded and perhaps unjustifiable if viewed from a dynamic economic viewpoint.

For example, as pointed out in the discussions of the items of "cash," it was found that "cash" is cash as long as the depository in which the same was placed had not closed its doors. When accounting and banking were less developed, and prior to the emergency of the credit system as known today, it may have been acceptable and sound practice to consider the sum deposited in the bank as "cash" since the item merely represented a sum given for safe-keeping—a "depositum."

The "cost or market—whichever is lower" maxim for valuation of inventories is usually justified on the ground of conservatism. Its effect is to consistently throw market-fluctuation "losses" into the past accounting period. If it can be held that unrealized

mated production basis, yet determining the annual total charge by the traditional straight-line method.

[25] There are a considerable number of other well known methods of estimating depreciation, such as the annuity method, compound interest method, declining percentage of cost, and the like. With the exception of the reducing balance method which appears in common use in England, most of these are seldom employed. (Proceedings of International Congress of Accounting, 1933, *Depreciation and Obsolescence by H. G. Howitt*, p. 628, Gee & Co., Ltd., London, 1933.)

[26] If there is doubt in the reader's mind as to the simplicity involved in the determination of what are repairs or betterments, let him consider the simple problem of replacing the bushing of a motor.

[27] It would seem that those who define depreciation as including obsolescence, would logically be obliged to admit that with the passage of time, the formerly unforeseen obsolescence (at least in part) has now become predictable and a part of each year's operations.

Graham, B. and Dodd, D. L., in their *Security Analysis* view, "long term depreciation as a form of obsolescence," p. 413.

losses can be thrown into the past accounting periods, then it must be conceded, as a matter of logic, that unrealized gains can be likewise recognized.[28]

Viewed rationally, it is hard to justify the widespread use of the "straight-line" method of depreciation. Accountants may be accused of pursuing the easiest method for, undoubtedly, most accountants would concede that the straight line has more weaknesses than merits. Even the English accountants, upon whom we place the blame for much of our conservativism, commonly use the reducing balance method and may express depreciation in terms of wear and tear or renewals.[29]

The prevalence of the straight-line method leaves the inference that the accountant is willing to sacrifice a scientific approach to the problem, which might require a delegation of his functions to the engineering profession or else the acquisition of the required technical knowledge, for the simply computed straight-line method. In the past the accountant has adopted procedures and principles to fit his own limitations rather than the functions which he was called upon to perform; in the future it would appear that the accountant must adjust his principles and practices as well as the technical facilities of his staff to meet the valuation demands of a dynamic society.

In spite of the many articles and treatises which have been written on the subject of depreciation, it still remains a moot question deserving a great deal of additional careful thought.[30] Accountants apparently fail to differentiate between depreciation as measuring the wear and tear of specific capital goods, and as maintaining a specific capital fund. This confusion has led to faulty reasoning, false conclusions, and to the presentation of methods of computing depreciation without regard to a distinction of its purpose.

In contrast with the treatment of depreciation, the item of promotional expenses is given little space, and equally little discussion in auditing and accounting books. They are generally waived with the implication that considerations of conservatism are all important.

The foregoing conclusions are merely typical of the many shortcomings which one finds in the field of auditing practice and theory as demonstrated by the leading texts. Illustrative of this is the modern audit report. It is almost the universal practice of public accountants to permit the presentation of the financial and operating statements to the complete exclusion of the audit report and to the frequent omission of the audit certificate. Nevertheless, it would appear that the audit report, and the comment contained therein, is of much more fundamental value to all interests in the corporate welfare. There can be no question but that the results achieved with the economic data by bookeeping procedure and auditing procedure and practice, are fundamentally determined by the procedure and policies which are followed. Accounting deals with the presentation of economic values.[31] Economic values have never been so definitely ascertainable that they can be portrayed by

[28] One might just as well argue that the sale of merchandise with ordinary trade discount also results in taking of unrealized profits in the present by throwing the discount expense or deduction from sales into the period of payment which may be subsequent to the period of the sale. If the inventories which are being valued include a considerable proportion of overhead expenses (including depreciation of fixed assets) another interesting and perhaps perplexing problem may be introduced, further indicating the inconsistency of accounting practice. If market value is less than cost of production (including depreciation as ordinarily determined) then the value placed upon the inventory will throw an unrealized loss on fixed assets (depreciation) into prior accounting periods. This is, of course, contrary to the usual practice of principles of valuation of fixed assets. It is conceivable that the depreciation of power plant for the following year may be more "current" than some of "current assets" such as supplies.

[29] H. G. Howitt, *Depreciation and Obsolescence*, Proceedings of the International Congress of Accounting, London. Gee & Co., Ltd., 1933, p. 624 f. Also review of same by A. C. Littleton, Accounting Review, Vol. IX, No. 1 (March, 1934) p. 103.

[30] "The most interesting fact about the depreciation policy of American industry is that there is none . . . ." Sloan, L. H., *Corporation Profits*, p. 41.

[31] An appreciation of this statement may be gained from the following. Casternholz, W. B., "The Accountant and Changing Monetary Values," Accounting Review, Dec., 1931, pp. 282–288; Krebs, W. S., "Asset Appreciation: Its Economic and Accounting Significance," Accounting Review, March, 1930, pp. 60–69; Sweeney, Henry W., "Stabilized Depreciation," Accounting Review, Sept., 1931, pp. 165–178.

in a single set of financial statements with little or no qualifications. A knowledge of the procedures and principles which have been followed by the auditor and by the corporation is essential to the reasonable interpretation and understanding of financial statements.[32]

Too implicit and unwarranted a faith has been placed in the supposedly inherent value of the dollar. No adequate scientific recognition is made of the importance and place of dollar value fluctuations on the financial statements, in the reports, analysis, and interpretation. The radical monetary value changes in Germany and France were necessary to force accountants to recognize economic changes.[33] In the United States, there has been little planned reflection as to the influences of impending monetary changes and doubtless it will require pressure upon the accountant to force a recognition of the situation. Instead of planning for and anticipating the problems wrought by dynamic economic changes he lags well behind them.

Auditing books have quite consistently failed to recognize the financial viewpoints of accounting capital. Their orthodox procedure teaches that there is an important distinction between capital stock and surplus, whereas both no par stock and par value stock are so readily adjustable to meet financial expediency that a sharp distinction, even if tenable in theory is doubtful in many practical situations.[34]

The quest for certainty and definiteness in data is inherent in human nature. The accountant, guided by the client's desires, has been prone to give certainty—even to the point of arbitrariness—to economic data which of themselves are not certain. In the quest for this pseudo-definiteness the auditor has apparently forgotten that he is dealing with material, the proper interpretation of which, demands more than a layman's knowledge of many related fields. It is in this relation that the auditor has failed to grasp the value of the assistance available from such fields of learning as engineering, economics, finance, etc.[35]

It is believed that functions and purposes of auditing have been too narrowly conceived, not only in the professional fields, but also in the schools preparatory to the profession. Foremost among these misconceptions is the position and importance attached to the courses in auditing relative to the curricula as a whole. In the accounting curricula of most of the leading schools, auditing courses precede or accompany finance, related economics, and even cost and systems courses. Placed in this point in the field of knowledge, the student considers auditing as another course, dealing mostly with test-checking and clerical accuracy. At this stage of his work, he has not acquired the proper background or perspective, nor has he the proper training, to see that auditing is the apex to all his accounting work. Properly viewed, auditing should be the final (with the possible exception of C.P.A. problems) and broadest course in the whole collegiate training in accounting. Furthermore, accounting must abandon its reticence in employing the valuable contributions of other fields. When accounting is viewed as a systematic method or procedure for classification and recordation of economic data, then will the merit of this contention be recognized.

One may even go back to the textbook itself to find many of the fundamental short-comings of auditing. In the first place, the majority of auditing texts emphasize the procedural aspects, rather than the fundamental premises upon which the whole routine is predicated and the results dependent. Frequently, only one method of approach to the problem is indicated or even suggested.

[32] See, Editorial, the Accounting Review, Sept., 1932, p. 216.

[33] Wasserman, Max J., "Accounting Practice in France during the Period of Monetary Inflation," Accounting Review, March, 1931, pp. 1–32; also the articles of H. W. Sweeney in the Accounting Review.

[34] "Par Value: Truth or Fiction," *Barron's*, Dec. 24, 1934, p. 20. The editorial writer sees the concept as a "conventional fiction."

[35] "After all, while the accountant is swirling in a maelstrom of engineering, technological and administrative data covering the actual facts of the individual enterprise, he must remember that beyond these kaleidoscopic elements lie the inexorable principles of human economic behavior." Burtchett, F. F., *Corporation Finance* (Harper & Bros., 1934) p. 507.

The profit and loss statement is steadily becoming more universally recognized as a necessary accompaniment to the certified balance sheet.[36] This does not appear to be fully recognized in auditing texts which usually devote only one or two chapters to the profit and loss statement in the detailed audit. A determination of the proper method of apportioning and allocating certain overhead items such as depreciation, managerial expense, and the like, may largely determine whether there shall be a "profit" or "loss." The importance of the profit and loss statement in determining future policies is out of all proportion to the attention given by the auditor to this part of the work.

The auditor cannot serve many masters, as he sometimes attempts to do today, without a change in the scope of his functions and work. He cannot serve the stockholder, the management, the creditor, and the stock market, without stating whom he is serving, since each requires a different point of view.[37] He must do this, or else greatly broaden the scope of his work to be all-embracing, and present "the facts" rather than "the fact" for one special interest.

There are many explanations for the shortcomings of auditing. Just a few are suggested here. As has been frequently pointed out, the influence of accountants who came from England and Scotland has been a great factor in confining auditing and accounting to a narrow conception of its scope. The accounting firms have been under the control of older trained accountants who have not seen, or perhaps have been unwilling or unable to undertake the more advanced and progressive types of work. Doubtless they will not change until they see direct pecuniary returns sufficient to recompense their costs. But it is the opportunity of the educational institutions to anticipate the future needs in training accountants, and to turn out men capable of undoubtedly undertaking the new kinds of tasks for which they will probably be required.

Perhaps some of the shortcomings of auditing texts are ascribable to the limited functions which the practicing auditor has been called upon to perform in the past. Since the early writers were men trained primarily in fundamentals of procedure in the narrow sense, it is natural that their writings should reflect these confinements. Later-day writers have tended to have an academic as well as a professional accounting background. This training has broadened their viewpoints and writings. With perhaps an eye to the future, it is natural that they should seek to make auditing what it should be, rather than what it has been.

In the beginning of the accountant's and auditor's work, he dealt with simple enterprise. In those times manufacturing processes were less dominant and capitalistic production with large capital aggregations less known. In such a society, with scattered

[36] W. Z. Ripley in his *Main Street and Wall Street*, p. 142 goes even further when he states "And it is the income account which is the more important of the two." See also Canning, J. B., "Some Divergence of Accounting Theory from Economic Theory," ACCOUNTING REVIEW, March 1929, pp. 1–8; and Littleton, A. C., "Dividends Presuppose Profits," ACCOUNTING REVIEW, December, 1934, p. 311.

[37] Frequently, when confronted with the view that their financial statements do not portray economic data accurately and consistently, accountants disclaim such purposes for their reports. Mention is commonly made of the distinctions between accounting and economic values. Yet, the layman, the accountant, the economist, and the financier all tend to lapse into the habit of reading economic values from the accounting statements. The accountant should recognize the social and economic significance of widespread use of his reports and accept the responsibility thrust upon him by the financial community. ("The techniques of modern accounting, now restricted almost altogether to enterprise affairs, are entirely adequate for finding such an index of final objective income of domestic groups. These techniques are, in fact, immeasurably more satisfactory to those uses than they are for the uses to which they are commonly devoted." Canning, J. B., and Nelson, E. G., "The Relation of Budget Balancing to Economic Stabilization." *American Economic Review*, March, 1934, p. 32.) It is not enough to say that the readers should realize the limitations of the accounting data; accountants must realize that their values are but one of many economic values. They should view their statements and reports in this broader economic background. (Contra, see F. F. Burtchett, *Corporation Finance*, p. 505, who states "there is no necessary relation between the 'business value' of a thing or an idea, and the 'economic value' of it." Prof. Dewing in his *Financial Policy of Corporations*, p. 453, expresses a similar idea to that of the writers. See also Littleton, A. C., "Value and Price in Accounting," ACCOUNTING REVIEW, September, 1929, pp. 147–154.) The accountants' prestige and usefulness will be immeasurably enhanced by "living up" to his reputation and opportunities rather than educating the public to the present limitations of his work.

plants, seldom in communication with one another, and seldom competing in wide markets for supplies or sales, values, i.e., "costs," were far more significant than is the case today. Since the valuations of fixed assets were less difficult due to less complex production processes, and since dynamic price influences were fewer and slower, cost was a more reliable criterion for price determination than it is today. But in a more mechanized society with quick communication and transport, wide and highly competitive as well as some monopolistic markets, the problems of burden and overhead distribution are more difficult, and the interrelations of cost, market prices, and all economic values are less direct and less certain. These broad trends of economic change emphasize the need of a newer concept of the scope of auditing.

THE TECHNIQUE OF STABILIZED ACCOUNTING

Henry W. Sweeney

In previous articles the writer has frequently referred to an accounting method that he has developed from European experience as "stabilized accounting." It has been referred to in such articles as a means of making accounting data more accurate by removing much of the effect of fluctuations in the value of the money unit (in which, of course, accounting data are expressed). But inasmuch as it has not yet been publicly explained in print, some misunderstanding of just what it does and does not do to the accounts has naturally resulted,[1] and a number of questions concerning its method have had to remain not fully answered. Hence, this article attempts to describe the essence of stabilized-accounting procedure as the writer has developed it from the rather rudimentary stage in which it was left at the termination of the inflation period in Europe.

Furthermore, the subject should be of timely interest now, when inflation looms ominously on the economic horizon, because it shows how to keep inflation from distorting accounting figures and from thereby misleading managements, which must rely on such figures to guide their enterprises safely.[2]

Due, however, to the limited space available for this exposition, only the general principles on which the stabilization technique rests can be concentrated upon here. Practical applications, which necessarily must pay particular attention to the time required and the degrees of refinement of the stabilizing indexes used, must thus await some future time to be fully explained and are hence mostly ignored, for the time being, in the following exposition.

1. INTRODUCTORY REMARKS

First, the stabilizing procedure is based upon the index of the general price level, or "general index."[3] The reason is that "measurement based on the general price index enables all values to be expressed in accordance with the customary main object of economic activity, namely, increased command over economic commodities and services in general."[4]

Second, stabilized accounting, by its use of price index-numbers, estimates the reproductive or replacement costs of merchandise and fixed assets as at any dates for which reliable indexes are available.[5] For example, if a machine cost \$300 when the price index for that particular piece of equipment was 150, the reproductive cost would be estimated as \$450 as of a later date for which the same index series registered 225. For $\$300 \times 225/150 = \$450$.

Third, there are two main kinds of assets and liabilities as regards the ways in which they are affected by changes in the value of money. The first kind is "money-value assets and liabilities" (the term used in Germany during inflation there); the second, "real-value assets and liabilities."

Money-value items consist of assets and liabilities whose face amounts are rigidly set at specified values and that, therefore, can not change as the value of money changes. Examples are cash, accounts and notes receivable and payable, bonds,[6] and mortgages. Real-value items, on the other hand, consist of assets, liabilities, and net

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[1] *E.g., Accountants' Handbook* (2nd ed. rev., 1932), pp. 1091–2.

[2] For the harmful effects of inflation upon managerial guidance cf. Sweeney, H. W., "How Inflation Affects Balance Sheets," the Accounting Review, IX, 4 (Dec., 1934).

[3] For a complete exposition of the reasons cf. Sweeney, H. W., "Maintenance of Capital," the Accounting Review, V, 4 (Dec., 1930).

[4] Sweeney, H. W., "Capital," the Accounting Review, VIII, 3 (Sept., 1933), 193.

[5] For a full discussion of this subject cf. Sweeney, H. W., "Approximation of Appraisal Values by Index Numbers," *Harvard Business Review*, XIII, 1 (Oct., 1934).

[6] An exception, of course, is a "valorized" bond, like that issued by the Rand Kardex Company, Inc. in 1925. This bond, devised by Mr. James H. Rand, Jr. and Professor Irving Fisher, provided that both principal and interest were to be adjusted for changes in the value of the dollar (as measured by the wholesale-commodity price-index of the U. S. Bureau of Labor Statistics), such changes being restricted for practical purposes to changes of 10% or more of the price level existing when the bonds were issued.

worth whose face amounts are not rigidly set at specified values and that are free, consequently, to move up or down as the value of money fluctuates. Examples are goods on hand, common stocks owned, machinery, buildings, land, and, common stock issued.[7]

Fourth, if a money-value asset is held while the value of money is falling (*i.e.*, while the general index is rising), a loss results to the creditor and a gain to the debtor. For instance, if cash of $100 remained on deposit from January 1, when the general index may be supposed to have been 100, to December 31, when the same index registered, also by assumption, 125, a loss would have occurred. This loss would be $25, the amount that the cash would have had to rise if it had risen in the same proportion as the general price level rose, *i.e.*, 25%.[8]

Fifth, although the general index is meant to be an average of the prices of all goods and services, the price indexes of most individual goods and services will, of course, distinctly differ from the general index and from one another, and will usually rise or fall at a faster or a slower rate than the general index rises or falls. This relationship of individual price movements to the general price movement explains the paradox that, "Prices apparently falling may actually be rising, and prices apparently rising may actually be falling."[9] It follows that if the price index of a specific real-value asset rises or falls in exact conformity with the general index, the general purchasing power of the capital originally invested in that asset has simply remained intact, in so far as it is measured by the market value of that asset (other conditions, like depreciation, being ignored for simplicity). Hence, real "appreciation" appears only when the price index of a particular asset rises or falls at a faster or slower rate than does the general index.[10] This capital gain is income.[11]

Sixth, for practical purposes the "realization" of income or loss is important. In the preceding illustration of the $100 cash left on deposit, the $25 loss was an unrealized one. (If, of course, the cash had all been spent on December 31, the loss would have become realized.) Similarly, if the replacement cost of a machine that originally cost $100 doubled while the general index was rising only 50%, the excess of the present value ($200) of the machine (ignoring depreciation) over the present equivalent ($150) of the general purchasing power originally invested in the machine would represent unrealized appreciation of $50. And if, of course, the machine was sold at the end of this period, the appreciation would all become realized (and would all be income).

Seventh, although the price levels of different dates and periods may be used in stabilization, the most useful one in this country is the price level of the date of the balance sheet that is being stabilized. Foreign writers differed on the question of whether the stabilized figures should be stated in prewar gold money or current depreciated paper money. Those who advocated a prewar unit were justified in doing so because the current value of the paper money usually varied so much that only careful study could determine what it was as at any date. In the United States, however, this objection does not exist; and since the price level as of the balance-sheet date is more comprehensible, because more recent, than any other of the suggested price levels (*e.g.*, prices in 1913 or 1926), it is used in the writer's form of stabilized accounting.

Finally, there are two main accepted ways

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[7] For a fuller discussion of money-value and real-value items, especially as they are apt to be affected by devaluation of the dollar, cf. Sweeney, H. W., "How New Dollar Will Affect Your Assets," *Forbes*, XXXIII, 4 (Feb. 15, 1934), 10–11.

[8] For the stimulation that led to the eventual development of ways to compute accurately the realized and unrealized profits and losses on changes in the value of money the author desires to acknowledge his indebtedness to J. H. Allen's criticism (in *The Journal of Accountancy*, XLV, 4, April, 1928, pp. 310–11) of the author's "German Inflation Accounting," which appeared in *The Journal of Accountancy*, XLV, 2 (Feb., 1928), pp. 104–16.

[9] Mahlberg, W., *Konjunkturbeeinflussung durch Kalkulations- und Kreditpolitik*, Leipzig, 1927, p. 1.

[10] For a complete statement of this position cf. Sweeney, H. W., "Stabilized Appreciation," the ACCOUNTING REVIEW, VII, 2 (June, 1932).

[11] For a full discussion of the reason for this view cf. Sweeney, H. W., "Income," the ACCOUNTING REVIEW, VIII, 4 (Dec., 1933).

Transaction		Price index	
Symbol	Description	General	Special
A	100 shares of capital stock having a par value of $100 each were sold at par for $10,000 in cash	100	
B	Equipment was bought for $2,400 in cash	120	150
C	Merchandise was purchased at a cost of $6,000 in cash	120	100
D	Two-thirds of the merchandise was sold for $7,800 on account	130	
E	Cash of $7,500 was received from customers	125	
F	Additional merchandise costing $7,500 was bought on account	125	125
G	Cash of $5,800 was paid to creditors	145	
H	Land was bought for $3,100 in cash	155	125
I	Of the goods comprised in the second purchase 50% were sold on account for $6,400	160	
J	Customers paid $6,200 in cash, of which $155 applied to balances remaining from the first sale	155	
K	Miscellaneous expenses of $2,800 were paid in cash. (The general index here, as also in the case of salaries, is an average for the length of time covered by the expense, and not the index for simply the date of payment.)	140	
L	Cash of $2,700 was disbursed for salaries	135	
M	Half of the land was sold for $3,000 in cash	160	
N	On the basis of a preliminary profit-and-loss statement a $1,400 dividend was declared and paid	140	
O	Depreciation on the equipment was 10%		
P	The closing merchandise inventory contained one-third the first lot of goods purchased and one-half the second		
Q	Closing entries		
	At the close of this first period the indexes were as follows:		
	General	150	
	Special:		
	Merchandise		160
	Equipment		200
	Land		90

of stabilization. The first is known as "stabilization of each entry," the second, as "balance-sheet stabilization." As their names imply, the former ascertains the stabilized equivalent of each entry, individually or in total; and the latter, for the most part, ascertains the stabilized equivalents of just the items that are to appear on the balance sheet at the close of the period.

These two techniques will now be illustrated. But first there must be shown the hypothetical transactions that form the material for this exposition, and the appearance of the accounts after these transactions have been entered in the usual way.

2. HYPOTHETICAL TRANSACTIONS OF THE X CORPORATION

In order to make the fundamental outlines of stabilized accounting stand forth in bold relief throughout the illustrations below, abnormal price variations are supposed to exist in the hypothetical transactions, which are listed at the top of this page.

3. APPEARANCE OF THE ACCOUNTS

Cash

A—Capital Stock	$10,000	B—Equipment	$ 2,400
E—Accounts Receivable	7,500	C—Purchases	6,000
J—Accounts Receivable	6,200	G—Accounts Payable	5,800
M—Land	3,000	H—Land	3,100
		K—General Expenses	2,800
		L—Salaries	2,700
		N—Surplus	1,400
		Balance	2,500
	$26,700		$26,700
Balance	$ 2,500		

Accounts Receivable

D—Sales	$ 7,800	E—Cash	$ 7,500
I—Sales	6,400	J—Cash	6,200
		Balance	500
	$14,200		$14,200
Balance	$ 500		

Merchandise Inventory

P—Purchases	$ 5,750		

Equipment

B—Cash	$ 2,400		

Reserve for Depreciation of Equipment

		O—Depreciation	$ 240

Land

H—Cash	$ 3,100	M—Cash	$ 1,550
		Balance	1,550
	$ 3,100		$ 3,100
Balance	$ 1,550		

Accounts Payable

G—Cash	$ 5,800	F—Purchases	$ 7,500
Balance	1,700		
	$ 7,500		$ 7,500
		Balance	$ 1,700

Capital Stock

		A—Cash	$10,000

Surplus

N—Cash	$ 1,400	Q—Profit & Loss	$ 2,160
Balance	760		
	$ 2,160		$ 2,160
		Balance	$ 760

Profit & Loss

Q—Purchases	$ 7,750	Q—Sales	$14,200
Q—Salaries	2,700	Q—Profit on Sale of Land	1,450
Q—General Expenses	2,800		
Q—Depreciation	240		
Q—Surplus	2,160		
	$15,650		$15,650

Sales

Q—Profit & Loss	$14,200	D—Accounts Receivable	$ 7,800
		I—Accounts Receivable	6,400
	$14,200		$14,200

Purchases

C—Cash	$ 6,000	P—Merchandise Inventory	$ 5,750
F—Accounts Payable	7,500	Q—Profit & Loss	7,750
	$13,500		$13,500

Salaries

L—Cash	$ 2,700	Q—Profit & Loss	$ 2,700

General Expenses

K—Cash	$ 2,800	Q—Profit & Loss	$ 2,800

Depreciation

O—Depreciation Reserve	$ 240	Q—Profit & Loss	$ 240

Profit on Sale of Land

Q—Profit & Loss	$ 1,450	M—Cash	$ 1,450

4. STABILIZATION OF EACH ENTRY

The first step under this method consists in ascertaining realized and unrealized gains and losses from changes in the value of money during the period. For greater clarity the long and complicated way of doing this is illustrated first. Only the money-value accounts, cash, accounts receivable, and accounts payable, are, of course, affected. The realized loss and the unrealized profit on money-value changes are then carried over to a summary sheet that stabilizes all entries in the other accounts. These two forms are shown on pages 189–90.

Aside from the reproductive-cost stabilization, which is a special supplementary procedure shown herein for completeness, each entry in the accounts is raised to its general-price-level equivalent at the end of the period. For this purpose the general index is used. For instance, since the first cash debit of $10,000, designated "A", originated when the general index stood at 100, its equivalent at the end of the period, when the index was 150, must have been: $10,000 ×150/100 = $15,000.

The first cash credit of $2,400, symbol "B", arose when the general index was 120. Hence, its equivalent at the end of the period must have been: $2,400×150/120 = $3,000.

This first disbursement was obviously made out of the first receipt—which means that $2,400 of the first receipt remained unused while the value of money was falling. This fall is represented by the rise of the general index from 100 to 120. Hence, for no money-value loss to have resulted, the $2,400 of cash spent should have risen 20%, *i.e.*, $480, and since it did not rise, a realized loss of $480 resulted. This loss is stated, however, in terms of a general index of 120. Stated in terms of the general index at the end of the period, the loss was $600 (*i.e.*, $480×150/120). This same figure, $600, is obtained more easily by the method shown on the first wide exhibit below. For there the original substance of the $2,400 of cash is measured as $3,600 directly in the general price level of the end of the period, and the value obtained for the cash is measured as $3,000 in the general price level of the end

THE X CORPORATION
STABILIZATION OF PROFIT AND LOSS ON MONEY-VALUE CHANGES
FOR THE FIRST PERIOD

Description	Increase			Decrease						Profit or *loss* on money-value change		Balance		
				Unstabilized	Equivalent at date of origin			Actual, current equivalent						
	Unstabilized	Index ratio	Stabilized		Increase	Index ratio	Stabilized	Index ratio	Stabilized	Realized	Unrealized	Unstabilized	Index ratio	Stabilized by date of origin
Cash A	$10,000	150/100	$15,000									$10,000	150/100	$15,000
B				$ 2,400	A	150/100	$ 3,600	150/120	$ 3,000	$ *600*		$ 7,600	150/100	$11,400
C				$ 6,000	A	150/100	$ 9,000	150/120	7,500	*1,500*		$ 1,600	150/100	$ 2,400
E	7,500	150/125	9,000									$ 7,500	150/125	$ 9,000
G				$ 1,600 4,200	A E	150/100 150/125	$ 2,400 5,040					$ 3,300	150/125	$ 3,960
				$ 5,800			$ 7,440	150/145	6,000	*1,440*				
H				$ 3,100	E	150/125	$ 3,720	150/155	3,000	*720*		$ 200	150/125	$ 240
J	6,200	150/155	6,000							4260		$ 6,200	150/155	$ 6,000
K				$ 200 2,600	E J	150/125 150/155	$ 240 2,516			791		$ 3,600	150/155	$ 3,484
				$ 2,800			$ 2,756	150/140	3,000	244				
L				$ 2,700	J	150/155	$ 2,613	150/135	3,000	387		$ 900	150/155	$ 871
M	3,000	150/160	2,813									$ 3,000	150/160	$ 2,813
N				$ 900 500	J M	150/155 150/160	$ 871 460				$156	$ 2,500	150/160	$ 2,344
				$ 1,400			$ 1,340	150/140	1,500	160				
Totals	$26,700		$32,813	$24,200			$30,469		$27,000	*$3,469*	$156	$ 2,500		$ 2,344
Accounts receivable D	$ 7,800	150/130	$ 9,000									$ 7,800	150/130	$ 9,000
E				$ 7,500	D	150/130	$ 8,654	150/125	$ 9,000	$ 346		$ 300	150/130	$ 346
I	6,400	150/160	6,000									$ 6,400	150/160	$ 6,000
J				$ 155 6,045	D I	150/130 150/160	$ 179 5,667				*$ 22* *22*	$ 145 355	150/130 150/160	$ 167 333
				$ 6,200			$ 5,846	150/155	6,000	154				
Totals	$14,200		$15,000	$13,700			$14,500		$15,000	$ 500	0	$ 500		$ 500
Accounts payable F	$ 7,500	150/125	$ 9,000									$ 7,500	150/125	$ 9,000
G				$ 5,800	F	150/125	$ 6,960	150/145	$ 6,000	$ 960	$340	$ 1,700	150/125	$ 2,040
Totals	$ 7,500		$ 9,000	$ 5,800			$ 6,960		$ 6,000	$ 960	$340	$ 1,700		$ 2,040

Summary
Total realized *loss* on money-value changes, transferred to following schedule .... *$ 2,009*
Total unrealized profit on money-value changes, transferred to following schedule $496

The X Corporation
Computation of Stabilizing Adjustments
As at the Close of the First Period

Description	Debit			Credit			Balance				Stabilizing adjustment of balance	
							Debit		Credit			
	Unstabilized	Index ratio	Stabilized	Unstabilized	Index ratio	Stabilized	Unstabilized	Stabilized	Unstabilized	Stabilized	Debit	Credit
Original-cost stabilization												
Balance-sheet accounts:												
Merchandise inventory	$ 2,000	150/120	$ 2,500									
	3,750	150/125	4,500									
	$ 5,750		$ 7,000				$ 5,750	$ 7,000			$ 1,250	
Equipment	$ 2,400	150/120	$ 3,000				$ 2,400	$ 3,000			600	
Reserve for depreciation of equipment				$ 240	150/120	$ 300			$ 240	$ 300		$ 60
Land	$ 3,100	150/155	$ 3,000	$ 1,550	150/155	$ 1,500	$ 1,550	$ 1,500				50
Capital stock				$10,000	150/100	$15,000			$10,000	$15,000		5,000
Surplus (dividend)	$ 1,400	150/140	$ 1,500				$ 1,400	$ 1,500			100	
Profit-and-loss accounts:												
Sales				$ 7,800	150/130	$ 9,000						
				6,400	150/160	6,000						
				$14,200		$15,000			$14,200	$15,000		800
Purchases	$ 6,000	150/120	$ 7,500	$ 2,000	150/120	$ 2,500						
	7,500	150/125	9,000	3,750	150/125	4,500						
	$13,500		$16,500	$ 5,750		$ 7,000	$ 7,750	$ 9,500			1,750	
Salaries	$ 2,700	150/135	$ 3,000				$ 2,700	$ 3,000			300	
General expenses	$ 2,800	150/140	$ 3,000				$ 2,800	$ 3,000			200	
Depreciation	$ 240	150/120	$ 300				$ 240	$ 300			60	
Profit on sale of land	$ 1,550	150/155	$ 1,500	$ 3,000	150/160	$ 2,813			$ 1,450	$ 1,313	137	
Realized loss on money-value changes, transferred from preceding schedule											2,009	
Unrealized profit on money-value changes, transferred from preceding schedule												496
Adjustment totals											$ 6,406	$ 6,406
											Additional	*adjustment*
Reproductive-cost stabilization												
Merchandise inventory	$ 2,000	160/100	$ 3,200									
	3,750	160/125	4,800									
	$ 5,750		$ 8,000				$ 5,750	$ 8,000			$ 1,000	
Equipment	$ 2,400	200/150	$ 3,200				$ 2,400	$ 3,200			200	
Reserve for depreciation of equipment				$ 240	200/150	$ 320			$ 240	$ 320		$ 20
Land	$ 3,100	90/125	$ 2,232	$ 1,550	90/125	$ 1,116	$ 1,550	$ 1,116				384
Unrealized income from appreciation												796
Adjustment totals											$ 1,200	$ 1,200

of the period, the $600 difference between them then being the realized loss from change in the value of money.

Of the third credit to cash (namely, $5,800), $1,600 remains from the first debit ("A"), and $4,200 comes from the second debit ("E"). Since the general price level at the time of disbursement was higher, a loss of $1,440 resulted.

The component parts of each balance are listed on this first exhibit to facilitate the work of ascertaining of which increase or increases each decrease is composed. Thus, after the second debit, $7,500, to cash, the cash balance was made up of $1,600 remaining from the first debit and, of course, the full $7,500 of the second debit. But since the next cash entry, a $5,800 credit, used up the $1,600 balance left from the first debit and $4,200 from the second debit, the balance, $3,300, then consisted entirely of cash included in the second debit.

The *unrealized* profit of $156 on cash arises from the fact that the $2,500 balance at the end of the period was part of the last cash debit, $3,000, which came in when the general index was 160, and hence was held while the general index fell to 150. In order for neither profit nor loss on this $2,500 balance to have been present, the cash would have had to diminish in the same ratio as the general price level, *viz.*, 1/16, from $2,500 to $2,344. This, of course, it did not do, inasmuch as cash is a money-value asset. So the difference of $156 is the unrealized profit.[12]

It will be observed that the calculations concerning the effects of money-value changes upon the cash and account-payable transactions above rest upon the assumption that each decrease reduces the oldest part of the balance first; or, in other words, that the balance is the remainder from all or part of solely the most recent increase,—and if that amount was insufficient to account for the entire balance, then of the immediately preceding increase also, and so on. In cost accounting this supposition[13] and that underlying the moving-average method are probably the two most commonly employed to determine the costs of materials and stocks consumed or sold. The moving-average procedure may also be used in stabilized calculations. But while no sounder in theory, it is more complicated and laborious in practice. The method employed above, namely, the so-called "first-in-first-out" method, will, however, ordinarily apply to transactions affecting only the cash. For in the case of most receivables and payables every decrease serves to reduce some *specific* increase, with the result that the *aggregate* balance is composed of individual, smaller balances, rather than of simply the most recent additions.

The stabilizing computations on the second exhibit above are much simpler. For they merely translate each debit and credit into its end-of-the-period equivalent (in terms of the general price level except in the case of the reproductive-cost stabilization). If each entry has been correctly converted to its stabilized equivalent, all the resulting differences between the stabilized equivalents and the plain book figures must balance.

These differences, or "stabilizing adjustments," when added to the book balances, obviously yield the stabilized balances. For instance, the first stabilizing adjustment in the section of the second exhibit reserved for such adjustments is $1,250. Added to the book balance of the merchandise inventory, namely, $5,750, it produces the stabilized figure for the merchandise inventory, at the close of the period, namely, $7,000.

These adjustments may be looked upon as simply memorandum information and thus be omitted from the formal books of account entirely. But to set them up in the

[12] No foreign writers appear to have devoted much thought to the unrealized gains and losses that result from changes in the value of money. Schmalenbach advocated crediting profit and loss (hence, distributable surplus) with all *unrealized* money-value income that the management estimated would prove to be *eventually* realized; *Grundlagen dynamischer Bilanzlehre* (3rd ed. rev., 1925), Leipzig, p. 254. Guerlet, A., however, clearly recommends *reserving* all unrealized gain of this nature; *Le Franc vaut-il le Franc?*, Paris, 1929, p. 32.

[13] Cf., *e.g.*, Finney, H. A., *Principles of Accounting*, I, chapter 28, pp. 17 f.; *Accountants' Handbook* (2nd ed. rev., 1932), pp. 426–7; and Nicholson and Rohrbach, *Cost Accounting*, p. 232.

ledger makes them permanently available with the figures to which they relate, gives them greater weight, and interferes in no way with the other accounts or with the customary bookkeeping routine. Hence, it is better to do so. In that case supplementary accounts like those immediately below are set up in the rear of the ledger, preferably by means of the general journal. The entries in these accounts, being necessarily self-balancing, are closed off as soon as made.

Balance-Sheet Stabilization

Merchandise inventory	$1,250	Depreciation reserve	$ 60
Equipment	600	Land	50
Dividend	100	Capital stock	5,000
Realized surplus	3,656	Unrealized surplus	496
	$5,606		$5,606

Profit-and-Loss Stabilization
Realized

Purchases	$1,750	Sales	$ 800
Salaries	300	Net decrease in realized surplus	3,656
General expenses	200		
Depreciation	60		
Profit on sale of land	137		
Money-value loss	2,009		
	$4,456		$4,456

Unrealized

Net increase in unrealized surplus	$ 496	Money-value profit	$ 496

The net effects of the profit-and-loss stabilization adjustments upon realized and unrealized surplus are, of course, the balances in, respectively, the "Realized" and "Unrealized" divisions of the profit-and-loss stabilization account. They must be ascertained before the balance-sheet stabilization account can be made to balance.

Although these stabilizing-adjustment accounts are closed, their contents, of course, are meant to be still alive and influential in correcting the figures in the regular accounts. The situation is analogous to that where all balances remaining open after completion of the closing entries, *i.e.*, all asset, liability, and permanent-proprietorship balances, are closed off to a "balance" account (which is more frequently seen abroad than in this country). For in such case the ledger data, although entirely closed out and ruled off, still set forth the financial facts of the period.

Stabilized accounting treats common stock and other investments in a business by its equity owners as real-value items, stabilizing them by the general index in order to show the current equivalents of the general purchasing power originally invested. When the accounts of a concern are stabilized, such restatement of capital stock does not mean, of course, that any stock records need be altered in any way. For the stabilizing adjustment simply supplements, and does not replace, the ordinary book figure.

It will be observed that a profit-and-loss item extending over a period of time is stabilized by the average general index for the period covered, and that any asset or liability affected thereby is stabilized by the same average index, instead of by the index for the date of receipt or payment. Such treatment of *profit-and-loss* items is correct. But should not the affected *assets* or *liabilities* be stabilized by the indexes for the dates of payment? And should not any money-value profits and losses resulting from deferring payment until the ends of the periods covered by such profit-and-loss items be shown separately? The answer is that such more elaborate procedure is hardly worth while. For it yields only a slightly more accurate classification of money-value profit and loss at the cost of greater complication and work.

For the sake of completeness the adjustments resulting from stabilization on the basis of *reproductive* cost are also computed on the second stabilization exhibit above. As an example, the equipment is assumed to have cost $2,400 when the price index for such equipment stood at 150, and the same sort of price index at the end of the period is supposed to have been 200. Then the cost of reproducing this asset must have been $2,400×200/150, or $3,200. But since the equivalent, in the *general* price level at the end of the period, of the *original* cost of this equipment was $3,000 (*i.e.*, $2,400×150/120), the appreciation was only $200 (and not $800, as orthodox methods would show).

THE X CORPORATION
STABILIZATION OF UNREALIZED SURPLUS FROM MONEY-VALUE CHANGES
AS AT THE CLOSE OF THE FIRST PERIOD

Actual, current-date balance		Balance stabilized by dates of origin		Unrealized profit or *loss*
Composition	Amount	Index ratio	Amount	
		Cash		
M	$2,500	150/160	$2,344	$156
		Accounts Receivable		
D	$ 145	150/130	$ 167	*$ 22*
I	355	150/160	333	22
Total	$ 500		$ 500	
		Accounts Payable		
F	$1,700	150/125	$2,040	$340
		Total		$496

This $200 is the stabilizing debit adjustment needed to raise the stabilized original-cost figure of $3,000 to the stabilized reproductive-cost figure of $3,200.

The same type of reasoning enables the other reproductive-cost stabilizing adjustments to be understood. These adjustments also balance and are also preferably to be set up in an account—after the previous stabilizing adjustments, in the rear of the ledger. Such an account in this case would appear as follows:

Reproductive-Cost Stabilization

Merchandise inventory	$1,000	Depreciation reserve	$ 20
Equipment	200	Land	384
		Unrealized income from appreciation	796
	$1,200		$1,200

At the close of the *next* period the asset, liability, and net-worth balances existing at the close of this first period would appear as opening balances of the next period. Of course, they would then be restated in the price level of the end of the next period. For such procedure forms like the two very wide exhibits above would be used.

By measuring substance, instead of just form, stabilized accounting is thus seen to be able not only to disclose a *realized* money-value profit or loss when ordinary accounting utterly fails to show that any transaction affecting profit and loss took place, but also to disclose an *unrealized* profit or loss when no transaction at all took place.

The method of calculating realized and unrealized money-value gains and losses shown on the first very wide form above is much too complicated and abstract ever to be used anywhere except in a theoretical dissection of the actual inner workings of stabilized accounting. The same results may be obtained in a minor fraction of the time by another procedure, which first computes the components of the *unrealized* money-value surplus or deficit, and then selects, from some of the information developed therein, figures that enable the *realized* money-value profit or loss to be computed. The unrealized section of this other, simpler procedure is shown at the top of this page, and the realized section is shown on the page following.

Stabilized and unstabilized financial statements prepared from the preceding accounts appear on pages 195–6. Stabilization on the basis of both original cost and reproductive-cost is shown in order to indicate how the two differ from each other and from accounting figures prepared from the books in the regular way. In an actual case, of course, either original cost or reproductive-cost would form the basis of valuation—not both. The captions on the profit-and-loss statement are designed to bring out more clearly the true natures of the various kinds of income and expense. In an actual case, of

THE X CORPORATION
STABILIZATION OF REALIZED PROFIT AND LOSS ON MONEY-VALUE CHANGES
FOR THE FIRST PERIOD

STABILIZATION OF INCREASES BY DATES OF ORIGIN
AND OF DECREASES BY DATES OF OCCURRENCE

Debit				Credit			
Description	Unstabilized	Index ratio	Stabilized	Description	Unstabilized	Index ratio	Stabilized
			Cash				
A	$10,000	150/100	$15,000	B	$ 2,400	150/120	$ 3,000
E	7,500	150/125	9,000	C	6,000	150/120	7,500
J	6,200	150/155	6,000	G	5,800	150/145	6,000
M	3,000	150/160	2,813	H	3,100	150/155	3,000
				K	2,800	150/140	3,000
				L	2,700	150/135	3,000
				N	1,400	150/140	1,500
	$26,700		$32,813		$24,200		$27,000
			Accounts Receivable				
D	$ 7,800	150/130	$ 9,000	E	$ 7,500	150/125	$ 9,000
I	6,400	150/160	6,000	J	6,200	150/155	6,000
	$14,200		$15,000		$13,700		$15,000
			Accounts Payable				
G	$ 5,800	150/145	$ 6,000	F	$ 7,500	150/125	$ 9,000

COMPUTATION OF REALIZED PROFIT AND LOSS

Explanation	Cash	Accounts receivable	Accounts payable
Total increases by dates of origin	$32,813	$15,000	$9,000
Add—Opening balance by dates of origin			
Total	$32,813	$15,000	$9,000
Less—Closing balance by dates of origin	2,344	500	2,040
Total decreases by dates of origin	$30,469	$14,500	$6,960
Less—Total decreases by dates of occurrence	27,000	15,000	6,000
Realized profit or *loss*	*$ 3,469*	$ 500	$ 960
Net realized *loss*		*$ 2,009*	

course, captions of the customary sort would be used.

To criticize the ordinary, orthodox accounting figures for their inaccuracy in a period characterized by price changes as great as the hypothetical ones above is somewhat like setting up a straw man and then knocking him down to show one's prowess. Nevertheless, it will be enlightening to examine the main kinds and degrees of error in the unstabilized figures below.

The stabilized figures are obviously more correct, other things being equal, because they are all expressed in the value of money as of one date. And since the profitability of each transaction has been based on the general index, the advance or decline of the enterprise has been measured directly in terms of the usual main motive of economic action, *viz.*, greater command over goods and services in general. Furthermore, the stabilized figures present information that is not otherwise available, such as profit and loss, realized and unrealized, on changes in the value of money. For these reasons the stabilized figures would seem much more valuable

The X Corporation
Stabilized and Unstabilized Balance Sheets
As at the Close of the First Fiscal Period

Assets	Original cost				Reproductive cost			
	Unstabilized		Stabilized		Unstabilized		Stabilized	
Current Assets:								
Cash	$ 2,500		$ 2,500		$ 2,500		$ 2,500	
Accounts receivable	500		500		500		500	
Merchandise inventory	5,750		7,000		8,000		8,000	
Total current assets		$ 8,750		$10,000		$11,000		$11,000
Fixed Assets:								
Equipment	$ 2,400		$ 3,000		$ 3,200		$ 3,200	
Less—Reserve for depreciation	240		300		320		320	
Net	$ 2,160		$ 2,700		$ 2,880		$ 2,880	
Land	1,550		1,500		1,116		1,116	
Total fixed assets		3,710		4,200		3,996		3,996
Total assets		$12,460		$14,200		$14,996		$14,996
Liabilities								
Current Liabilities:								
Accounts payable		$ 1,700		$ 1,700		$ 1,700		$ 1,700
Net Worth								
Capital Stock		$10,000		$15,000		$10,000		$15,000
Surplus or *Deficit:*								
Realized:								
Net income for the period	$ 2,160		*$ 1,496*		$ 2,160		*$ 1,496*	
Less—Dividend paid	1,400		1,500		1,400		1,500	
Balance	$ 760		*$ 2,996*		$ 760		*$ 2,996*	
Unrealized:								
Net income for the period			496		2,536		1,292	
Net surplus or *deficit*		760		*2,500*		3,296		*1,704*
Total net worth		$10,760		$12,500		$13,296		$13,296

The X Corporation
Stabilized and Unstabilized Profit and Loss Statements
For the First Period

Realized Income	Original cost				Reproductive cost			
	Unstabilized		Stabilized		Unstabilized		Stabilized	
Changes in the Special Value of Money:								
Merchandise:								
Net sales		$14,200		$15,000		$14,200		$15,000
Less—Cost of goods sold:								
Net purchases	$13,500		$16,500		$13,500		$16,500	
Deduct—Final merchandise inventory	5,750	7,750	7,000	9,500	5,750	7,750	7,000	9,500
Gross profit on sales		$ 6,450		$ 5,500		$ 6,450		$ 5,500
Less—Selling, administrative, and financial expenses:								
Salaries	$ 2,700		$ 3,000		$ 2,700		$ 3,000	
General expenses	2,800		3,000		2,800		3,000	
Depreciation	240	5,740	300	6,300	240	5,740	300	6,300
Net profit on operations		$ 710		*$ 800*		$ 710		*$ 800*
Fixed assets:								
Profit on sale of land		1,450		1,313		1,450		1,313
Net income from realized changes in the special value of money		$ 2,160		$ 513		$ 2,160		$ 513
Changes in the General Value of Money:								
Loss on cash			$ 3,469				$ 3,469	
Less—Profit on:								
Accounts receivable			$ 500				$ 500	
Accounts payable			960				960	
Total			$ 1,460				$ 1,460	
Net loss on realized changes in the general value of money				$ 2,009				$ 2,009
Realized net income for the period		$ 2,160		*$ 1,496*		$ 2,160		*$ 1,496*
Unrealized Income								
Changes in the Special Value of Money:								
Merchandise						$ 2,250		$ 1,000
Fixed assets:								
Equipment (net)					$ 720		$ 180	
Less—Land					434	286	384	*204*
Net income from unrealized changes in the special value of money						$ 2,536		$ 796
Changes in the General Value of Money:								
Profit on:								
Cash			$ 156				$ 156	
Accounts payable			340				340	
Net income from unrealized changes in the general value of money				$ 496				496
Unrealized net income for the period				$ 496		$ 2,536		$ 1,292
Final net income for the period		$ 2,160		*$ 1,000*		$ 4,696		*$ 204*

to everyone interested in the accuracy, appropriateness, and completeness of accounting statements.

On each of the four preceding classes of balance sheet, stabilized and unstabilized, original-cost and reproductive-cost, the money-value items are identical. The real-value assets, however, differ. Thus, the merchandise inventory, shown at its original cost of $5,750 on the usual orthodox form of balance sheet, appears as $7,000 when stabilized on the basis of original cost, and at $8,000, both stabilized and unstabilized, if valued at cost of reproduction. The figure for equipment rises similarly, but that for land falls. On the original-cost type of balance sheet the unstabilized figure for merchandise inventory is understated by $1,250, or 17.9%, with reference to its stabilized equivalent ($7,000); and both the conventional figures for equipment and depreciation reserve are 20% too low. Other less important errors in the orthodox valuations also exist.

The *most* important of all the errors and shortcomings in the unstabilized amounts appear, however, in the most important of all the sections on the balance sheet, namely, net worth. For each of the stabilized forms of this exhibit shows a *capital-stock figure 50% greater* than that on the corresponding orthodox one and a *substantial deficit* instead of a *substantial surplus*. In the original-cost balance sheets the unstabilized amount of realized net income for the period, *viz.*, $2,160, is $3,656 higher than its stabilized equivalent (a $1,496 loss), the degree of inaccuracy thus being 244.4%; the absence of any orthodox figure for *unrealized* net income causes the unrealized surplus to be $496, or 100.0%, too low; and the amount of net surplus appearing among the conventional data, namely, $760, is $3,260, *i.e.*, 130.4%, too high. In the *reproductive*-cost balance sheets the unstabilized figure for realized net income is, again, $3,656, or 244.4%, too high; for unrealized net income,[14] $1,244, *i.e.*, 96.3%, too high; and for net surplus, $5,000, or 293.4%, too high.

Of great significance is the fact that the unstabilized *reproductive*-cost balance sheet above differs in only the *detailed* composition of *net worth* from the stabilized reproductive-cost balance sheet, the contents of the assets and liabilities being identical. Hence, the figures on a reproductive-cost or replacement-cost balance sheet prepared in the orthodox fashion will usually be nearer to those shown on a reproductive-cost or replacement-cost balance sheet prepared in the stabilized fashion than will the amounts on an *original*-cost balance sheet prepared in the orthodox fashion be to those on an original-cost balance sheet prepared in the stabilized fashion. And, therefore, because valuation at cost of reproduction or replacement necessarily conduces toward a much more homogeneous measurement of all assets than does valuation at original cost, it can not help being viewed with approbation by stabilized accounting, which is primarily concerned with homogeneous measurement. In actual practice, however, usually just securities or inventories or fixed assets are valued at cost of reproduction or replacement, instead of, as in the present case, *all* the real-value items.

The stabilized *profit-and-loss* statements likewise present more accurate, appropriate, and comprehensive information than do the orthodox ones. The extra information on the stabilized exhibits here emphasizes two types of increment and decrement that are commonly overlooked, *viz.*, unrealized income and the profit or loss that results from money-value changes.

The contents of the realized-income sections on the two unstabilized forms of profit-and-loss statement are identical. And the contents of the realized-income sections on

[14] Objection may be raised against showing appreciation as income on the ordinary type of profit-and-loss statement inasmuch as many accountants claim that appreciation is capital, and not income. The reply is that the appreciation is shown above as income simply to permit it to be more readily compared with the stabilized treatment, which definitely does regard stabilized appreciation as income. The fact is, though, that if capital consists of just the original *money* outlay for an article, appreciation *is* income (although of a special, unrealized sort). If, on the other hand, capital is, more sensibly, regarded as physical capital (which, incidentally, is *not* the stabilized view), then appreciation is capital, and not income,—*but* a whole set of difficult new problems then arises. (Cf. Sweeney, H. W., "Stabilized Appreciation," the ACCOUNTING REVIEW, VII, 2, June, 1932.)

THE X CORPORATION
STABILIZED AND UNSTABILIZED FINANCIAL AND OPERATING RATIOS
AS AT THE CLOSE OF THE FIRST PERIOD

Ratios	Original cost		Reproductive cost	
	Unstabilized	Stabilized	Unstabilized	Stabilized
Financial:				
Current assets to current liabilities	5.15	5.88	6.47	6.47
Quick assets to current liabilities	1.76	1.76	1.76	1.76
Current assets to fixed assets	2.36	2.38	2.75	2.75
Net worth to liabilities owed outsiders	6.33	7.35	7.82	7.82
Inventories to accounts receivable	11.50	14.00	16.00	16.00
Cash to total assets	.20	.18	.17	.17
Dividends to average capital stock	.14	.10	.14	.10
Book value per share of capital stock	$107.60	$125.00	$132.96	$132.96
Operating:				
Realized net income to average realized net worth	.21	*.11*	.21	*.11*
Final net income to average net worth	.21	*.073*	.40	*.014*
Dividends to realized net income	.65	*1.00*	.65	*1.00*
Dividends to final net income	.65	*1.50*	.30	*7.35*
Gross profit on sales to net sales	.45	.37	.45	.37
Net profit on operations to net sales	.050	*.053*	.050	*.053*
Realized net income to net sales	.15	*.10*	.15	*.10*
Gross profit on sales to average total assets	.57	.38	.52	.37
Net profit on operations to average total assets	.063	*.055*	.057	*.053*
Realized net income to average total assets	.19	*.10*	.17	*.10*
Final net income to average total assets	.19	*.068*	.38	*.014*
Net sales to average total assets	1.26	1.03	1.14	1.00
Cost of sales to average inventory	2.70	2.71	1.94	2.38
Net sales to average accounts receivable	56.80	60.00	56.80	60.00
Net sales to average net worth	1.37	1.09	1.22	1.06
Net sales to average fixed assets	7.65	7.14	7.11	7.51

the two *stabilized* forms are also identical.

As would be expected, most of the profit-and-loss data that were compiled in the traditional manner are quite wrong and incomplete. The gross profit on sales, for example, instead of being $6,450, or 45.4% of sales, was only $5,500, or 36.7%. The net profit on operations, *viz.*, $710 according to orthodox accounting, is revealed as a *loss* of $800, hence being $1,510, or 188.8%, too great. Next, the net income from realized changes in the special value of money, *i.e.*, the net income from business activities, $2,160 and 15.2% of sales on each of the unstabilized forms, was only $513 and 3.4% of sales on the stabilized ones—an overstatement of $1,647, or 321.1%. The net loss on realized changes in the general value of money, entirely neglected by the unstabilized type of exhibit, is shown to have been $2,009, or 13.4% of sales—a relatively large item and, especially because a loss, an undeniably weighty one. In consequence of these corrections the $2,160 realized net *income* on the orthodox statements is transformed into a $1,496 *loss* on the stabilized statements, the unstabilized figure thus being, as previously pointed out, $3,656, *i.e.*, 244.4%, too high.

As regards *unrealized* income—a class of gain and loss well deserving of attention because it is frequently a portent of the effect that later transactions will exert—the two orthodox forms totally disregard a $496 gain from unrealized variations in the general worth of money. The unstabilized *reproductive*-cost exhibit, furthermore, overstates the enhancement in appreciation by $1,740, or 218.6%, and the total unrealized net income by $1,244, or 96.3%.

But the largest degrees of misstatement are found in the unstabilized *final* net income, this figure on the original-cost form of profit-and-loss statement being $3,160, *i.e.*, 316.0%, too high, and on the reproductive-cost form, $4,900, or 2,402.0%, too high.

To throw still more light on the types of accounting error arising during a period of distinctly fluctuating prices, the stabilized

Ratios	Original cost	Reproductive cost
Financial:		
Dividends to average capital stock	40.0	40.0
Operating:		
Realized net income to average realized net worth	290.9	290.9
Final net income to average net worth	387.7	2,957.1
Dividends to realized net income	165.0	165.0
Dividends to final net income	143.3	104.1
Net profit on operations to net sales	194.3	194.3
Realized net income to net sales	250.0	250.0
Gross profit on sales to average total assets	50.0	40.5
Net profit on operations to average total assets	214.5	207.5
Realized net income to average total assets	290.0	270.0
Final net income to average total assets	379.4	2,814.3

and unstabilized ratios are listed at the top of the previous page.

The foregoing ratios, on which important business and financial decisions are often based, are also askew in this laboratory case, some of them greatly. The larger errors, all overstatements, are listed in terms of percentages at the top of this page.

Obviously the operating ratios that are most wrong here are the most important ones.

5. BALANCE-SHEET STABILIZATION

The second of the two main types of stabilization procedure that have earned esteem is "balance-sheet stabilization." In most cases this procedure can be completed in but a small percentage of the time and cost that stabilization of each entry requires. Nevertheless, it can yield as complete a stabilized balance sheet, as complete an income statement except in the details of operating expenses, and most of the other financial information and statistics, such as ratios, that are commonly prepared at the close of a period. Hence, it is much more practical than stabilization of each entry. (During the inflation years in Germany stabilized accounting was often used,[15] and the variation usually encountered there, especially in large concerns,[16] probably consisted of balance-sheet stabilization, although stabilization of each entry was also to be seen.[17])

In the preparation of a stabilized balance sheet on the usual valuation basis of original cost, and of a stabilized profit-and-loss statement, the steps are as listed directly hereunder. All the data that are needed for this work are, of course, contained in just the ledger accounts and in Snyder's general-price index series.

1. All the real-value assets and the owners' investments in the business (*e.g.*, common stock) are first stabilized, as illustrated by the form at the top of page 200. (Of course, if there are any real-value liabilities, which are rare, they must also be stabilized.)
2. The unrealized surplus or deficit from changes in the value of money is stabilized.

The form here required is identical with the short one shown above in connection with the stabilization of each entry.

3. The realized profit and loss on changes in the general value of money is stabilized.

This form is also identical with the short

[15] Quittner, P., "The Banking System of Germany," *Foreign Banking Systems*, edited by Willis and Beckhart, pp. 638–9. The same opinion was expressed on Sept. 30, 1929 by the German authority Professor F. Schmidt during a personal discussion of the subject with the writer. Raffegeau and Lacout make a similar assertion in their *Établissement des Bilans-or*, Paris, 1926, p. 113.

[16] Mahlberg declares that in 1923 balance-sheet stabilization, in terms of gold marks, was commonly used by larger concerns; *Bilanztechnik und Bewertung bei schwankender Waehrung* (3rd ed. rev., 1923), Leipzig, p. 187, fn. See also Mueller, E., "Zum jetzigen Stand der Goldbilanzfrage in Europa," *Schweizerische Juristen-Zeitung*, xxv, 24 (June 15, 1929), 369.

[17] Fain, G., *Comment se défendre contre l'Inflation et se protéger en cas de Stabilisation* (2nd ed., 1926), Paris, p. 22.

The X Corporation
Original-Cost Stabilization of Real-Value Assets and Capital Stock
To and Including the Close of the First Period

Debit				Credit			
Description	Unstabilized	Index ratio	Stabilized	Description	Unstabilized	Index ratio	Stabilized
			Merchandise Inventory				
C	$ 2,000	150/120	$ 2,500	Balance	$ 5,750		$ 7,000
F	3,750	150/125	4,500				
	$ 5,750		$ 7,000		$ 5,750		$ 7,000
Balance	$ 5,750		$ 7,000				
			Equipment				
B	$ 2,400	150/120	$ 3,000				
			Reserve for Depreciation of Equipment				
				O	$ 240	150/120	$ 300
			Land				
H	$ 3,100	150/155	$ 3,000	M	$ 1,550	150/155	$ 1,500
				Balance	1,550		1,500
	$ 3,100		$ 3,000		$ 3,100		$ 3,000
Balance	$ 1,550		$ 1,500				
			Capital Stock				
				A	$10,000	150/100	$15,000

one shown in connection with the stabilization of each entry.

4. Any changes in the ordinary book surplus during the period (for example, dividends declared) are stabilized.

Although a form is hardly needed to stabilize the only change in the ordinary surplus of this case, namely, a dividend declared, the form below is used for illustration:

The X Corporation
Stabilization of Changes in Realized Operating Surplus
For the First Period

Debit				Credit			
Description	Unstabilized	Index ratio	Stabilized	Description	Unstabilized	Index ratio	Stabilized
			Dividend Declared				
N	$1,400	150/140	$1,500				

5. A combined stabilized-and-unstabilized balance sheet is constructed.

This form would be identical with the original-cost section of the balance sheet constructed above in connection with the stabilization of each entry. The stabilized and unstabilized balances of the real-value assets and of the capital stock are entered on the exhibit, as are also the money-value asset and liability balances, which, of course, are the same for both the stabilized and unstabilized sets of figures.

Inasmuch as the stabilized assets total $14,200, and the stabilized liabilities, $1,700, the stabilized net worth can be computed at this stage and entered; it must be the difference, $12,500. But since the stabilized capital stock has already been ascertained to be $15,000, the total or net stabilized surplus or deficit must be the difference between $12,500 and $15,000. This difference is a deficit of $2,500.

Still working backwards, the stabilizing procedure easily determines the realized and unrealized parts of this $2,500 deficit. The unrealized part has already been cal-

culated by the second step above as a surplus of $496. Hence, the realized part must be the sum of the two, *viz.*, $2,996, and must be a deficit.

The last figure now needed to complete the stabilized balance sheet is the realized net income for the period. It can be quickly calculated by the old method of ascertaining the net profit or loss for a period when only the opening and closing surplus balances and the changes in surplus during the period are known; thus:

Explanation	*Stabilized amount*
Realized surplus at the close of the period	*$2,996*
Less—Realized surplus at the beginning of the period	*0*
Net increase in realized surplus during the period	*$2,996*
Add—Dividend declared	1,500
Realized net income for the period	*$1,496*

6. The net sales or revenue and any extraordinary income or expense are stabilized, thus:

THE X CORPORATION
STABILIZATION OF OPERATING INCOME AND OF EXTRAORDINARY INCOME
FOR THE FIRST PERIOD

Debit				Credit			
Description	Unstabilized	Index ratio	Stabilized	Description	Unstabilized	Index ratio	Stabilized
			Net Sales				
Balance	$14,200		$15,000	D	$ 7,800	150/130	$ 9,000
				I	6,400	150/160	6,000
	$14,200		$15,000		$14,200		$15,000
				Balance	$14,200		$15,000
			Profit on Sale of Land				
Q	$ 1,550	150/155	$ 1,500	M	$ 3,000	150/160	$ 2,813
Balance	1,450		1,313				
	$ 3,000		$ 2,813		$ 3,000		$ 2,813
				Balance	$ 1,450		$ 1,313

7. The total operating expense is stabilized.

The stabilized total of the operating expenses is now the only figure needed to complete a fairly detailed stabilized profit-and-loss statement. It is quickly computed as follows:

Explanation	*Stabilized amount*
Realized net income for the period	*$ 1,496*
Add—Realized net loss on money-value changes	2,009
Net income from business activities	$ 513
Less—Extraordinary income	1,313
Net profit on operations	*$ 800*
Less—Net sales	15,000
Operating expenses	$15,800

Of course, the stabilized figure for operating expenses as thus calculated must—and does—coincide with the stabilized total of the operating expenses shown above in connection with the stabilization of each entry; thus:

Stabilized operating expenses as computed by stabilization of each entry:	
Cost of goods sold	$ 9,500
Salaries	3,000
General expenses	3,000
Depreciation	300
Stabilized operating expenses as computed by balance-sheet stabilization	$15,800

8. A combined stabilized-and-unstabilized profit-and-loss statement is constructed.

The form and contents of this exhibit are shown in the "Original-cost" columns of the profit-and-loss statement that appears below in connection with the application of balance-sheet stabilization to valuation on

the basis of cost of reproduction. Because there was no balance in the stabilized unrealized surplus at the beginning of the period, the full amount at the end of the period, namely, $496, represents the stabilized unrealized gain for the period. In the present instance this gain was all attributable to changes in the general value of money. When a balance in unrealized surplus does exist at the beginning of a period as well as at the close, the difference between them is, other conditions remaining unchanged, the unrealized profit or loss for that period.

It may be noted, too, that all the ratios shown above in the exposition of stabilization of each entry can, with three exceptions, be computed when only balance-sheet stabilization is applied. These three exceptions are the three following operating ratios:

- Gross profit on sales to net sales,
- Gross profit on sales to average total assets,
- Cost of sales to average inventory.

In balance-sheet stabilization the stabilized figures are not all determined independently of one another and then made to balance, as they are when each entry is stabilized. In balance-sheet stabilization, *e.g.*, many of the stabilized figures are computed by working back by means of previously-computed stabilized figures. Hence, there is no automatic, independent check on accuracy, as there is in stabilizing each entry. For this reason when balance-sheet stabilization is used, all the stabilizing computations must be carefully checked. This is especially true of the computations involving fixed assets and net-worth investments. For in practice these computations up to certain dates are restated in later price levels and carried forward, and any subsequent changes, also restated in the same later price levels, are simply added to them or subtracted from them. The result is that errors in such computations are liable to become permanent.

Like stabilization of each entry, balance-sheet stabilization does not necessarily have any formal connection with the books of account. But because the stabilized data will presumably exert some influence whenever stabilized financial statements are prepared, the self-balancing, stabilizing differences are preferably to be permanently and formally recognized by being entered in the ledger. Only one account need be used when balance-sheet stabilization is applied. It should be placed in the very rear of the

THE X CORPORATION
REPRODUCTIVE-COST STABILIZATION OF REAL-VALUE ASSETS
TO AND INCLUDING THE CLOSE OF THE FIRST PERIOD

Debit				Credit			
Description	Unstabilized	Index ratio	Stabilized	Description	Unstabilized	Index ratio	Stabilized
			Merchandise Inventory				
C	$2,000	160/100	$3,200	Balance	$5,750		$8,000
F	3,750	160/125	4,800				
	$5,750		$8,000		$5,750		$8,000
Balance	$5,750		$8,000				
			Equipment				
B	$2,400	200/150	$3,200				
			Reserve for Depreciation of Equipment				
				O	$ 240	200/150	$ 320
			Land				
H	$3,100	90/125	$2,232	M	$1,550	90/125	$1,116
				Balance	1,550		1,116
	$3,100		$2,232		$3,100		$2,232
Balance	$1,550		$1,116				

The X Corporation
Stabilization of Unrealized Income from Appreciation
As at the Close of the First Period

Asset	Unstabilized			Stabilized		
	Reproductive cost	Original cost	Appreciation	Reproductive cost	Original cost	Appreciation
Merchandise inventory	$8,000	$5,750	$2,250	$8,000	$7,000	$1,000
Equipment	3,200	2,400	800	3,200	3,000	200
Reserve for depreciation	*320*	*240*	*80*	*320*	*300*	*20*
Land	1,116	1,550	*434*	1,116	1,500	*384*
Total	$11,996	$9,460	$2,536	$11,996	$11,200	$ 796

ledger to keep it more readily distinguishable from the ordinary accounts. In the present hypothetical case it would appear as follows, the amounts of the adjustments being readily determined from the stabilized financial statements (which should be prepared first):

Stabilization Adjustments

Merchandise inventory	$1,250	Depreciation reserve	$ 60
Equipment	600	Land	50
Dividend	100	Capital stock	5,000
Operating expenses	2,310	Unrealized money-value surplus	496
Profit on sale of land	137	Sales	800
Realized money-value loss	2,009		
	$6,406		$6,406

If the balance sheet is to be stabilized on the basis of reproductive cost, instead of original cost, the form above must be used. It is important to observe that all real-value assets must still be stabilized on the basis of original cost when they are to be shown on the balance sheet at cost of reproduction. For otherwise the stabilized appreciation, which is looked upon by stabilized accounting as the excess of reproduction cost over the present general-price-level equivalent of the original cost, can not be ascertained.

The type of profit-and-loss statement to be prepared when balance-sheet stabilization is used appears on page 204. This form is more like the customary one. It shows the stabilized and unstabilized figures on the basis of both original cost and reproductive cost. In actual practice, of course, only one or the other of such two bases would probably be used, and not both.

Stabilized accounting abroad never grew beyond a rather elementary stage of development. The reason probably was that in every country where inflation compelled serious thought to be given to stabilizing accounting data the inflation passed before stabilizing methods had reached the stage of maturity; and then, with the passing of the intense immediate need for practical yet informative stabilizing methods, interest in the whole subject waned. Accountants in countries that did not experience inflation until other countries had already experienced it and written about it profited, of course, from what had already been learned, just as statesmen, economists, and others profited from studying the many phenomena that had accompanied inflation in other countries.[18] Hence, stabilized accounting improved as time went on and as accountants with different viewpoints and backgrounds attacked its problems.[19]

The usual foreign method of balance-sheet stabilization was correct in principle. But simplicity was obtained at the expense

[18] As regards Austria, for instance, Rosendorff and Hofmannsthal in their *Das Oesterreichische Goldbilanzgesetz*, Vienna, 1925, admit Austrian indebtedness to the extreme German experience and declare that revenge was thus obtained for the earlier, bitter years in which Austria served as model for all the very interesting aspects of inflation.

As regards Poland's indebtedness to German inflation cf. *Dziennik Ustaw*, No. 42, May 21, 1924.

[19] Because inflation reached its greatest height in Germany, and because German literature on all aspects of stabilized accounting is the most extensive in existence, any thorough study of stabilized accounting must begin with the German methods. The French literature, however, is of hardly less importance, mainly because it expounds the results of further study and application, during the franc-inflation period, of the better ideas and methods earlier developed in Germany. Although less

THE X CORPORATION
STABILIZED AND UNSTABILIZED PROFIT AND LOSS STATEMENTS
FOR THE FIRST PERIOD

Realized	Original cost		Reproductive cost	
	Unstabilized	Stabilized	Unstabilized	Stabilized
Net sales	$14,200	$15,000	$14,200	$15,000
Less—Operating expenses	13,490	15,800	13,490	15,800
Net profit on operations	$ 710	$ *800*	$ 710	$ *800*
Profit on sale of land	1,450	1,313	1,450	1,313
Net income on business activities	$ 2,160	$ 513	$ 2,160	$ 513
Profit and *loss* on changes in money value:				
Cash		$ *3,469*		$ *3,469*
Accounts receivable		500		500
Accounts payable		960		960
Net *loss*		$ *2,009*		$ *2,009*
Realized net income for the period	$ 2,160	$ *1,496*	$ 2,160	$ *1,496*
Unrealized				
Income from appreciation:				
Merchandise			$ 2,250	$ 1,000
Equipment			720	180
Land			*434*	*384*
Total			$ 2,536	$ 796
Profit from changes in money value:				
Cash		$ 156		$ 156
Accounts payable		340		340
Total		$ 496		$ 496
Unrealized net income for the period		$ 496	$ 2,536	$ 1,292
Final net income for the period	$ 2,160	$ *1,000*	$ 4,696	$ *204*

of accuracy and comprehensiveness. For the assets, liabilities, and permanent net-worth items (like owners' investments and net-worth reserves) were usually stabilized on some gold basis (usually the national gold unit), instead of with reference to some form of general purchasing power; the excess of the total stabilized assets over the total of the stabilized liabilities and permanent net-worth items was designated simply "surplus," although it usually was largely unrealized; and no attempt was made to ascertain any detailed stabilized information about the profit-and-loss activities of the period—indeed, the great possibilities of intensive inquiry into the subject of gain and loss from fluctuations in the purchasing power of money were almost entirely overlooked.

The stabilizing procedure may, of course, still be limited to the same minimum quantity of work wherever time is of the essence and cost must be kept as low as possible. But the stabilized amount of *unrealized* surplus or deficit from change in the worth of money is so inexpensive to ascertain and yet so informative with regard to action affecting surplus, that there is seldom justification for failure to compute it. The remaining portion of surplus must, of course, be all realized surplus unless some other class of unrealized surplus, like appreciation, exists. And the figures needed for the main classifications on

in quantity, it seems better in quality, probably because it is more recent and more interested in practical application, although the apparent desire of some French writers to develop methods of obtaining approximately correct results at little cost seems to have led them into important theoretical inaccuracies. The German literature represents exhaustive pioneer work in basic principles, whereas the French consists essentially of greater perfection in details.

a stabilized income statement may then ordinarily be ascertained without an undue amount of further labor. If, as is generally true, the current period is not the first one, this plan of procedure necessitates constructing a stabilized balance sheet as at the *beginning* of the period also. But such a requirement differs in no essential particulars from the usual public-accounting one that an audited balance sheet for the commencement, as well as the termination, of the period must, in effect, be prepared if the result of operations is to be certified.

In conclusion, a passing glance may well be given to the alterations that have to be imposed upon stabilized accounting to make it suitable for actual, practical application—at least, in the writer's opinion.

In the first place, as indicated above, only balance-sheet stabilization should normally be used.

In the second place, all book amounts that are stabilized should be stabilized by monthly indexes, not by daily or weekly ones. There are two exceptions. The first of these is that the index as of the last day in each period for which financial statements are to be stabilized is estimated by averaging. (*E.g.*, Snyder's general indexes for December, 1934 and January, 1935 are, respectively, 140 and 141. Since each of these indexes represents a whole month, it may with propriety be looked upon as representative of the mid-point of that month, *i.e.*, approximately the fifteenth day. Hence, the average of the two indexes, *viz.*, 140.5, may be estimated as the index for December 31, which is about half-way between December 15 and January 15.) The second exception is that an abnormally large amount occurring on a date substantially removed from the middle of a month is stabilized by an estimated index for the exact date, such index being approximated by interpolation (a process similar to that exemplified immediately above in estimating the general index for December 31, 1934).

Finally, in practice each amount that is to be stabilized in a price level as of the end of a period should not be directly and individually restated in that price level, as was done in the illustrations above. Instead, whole classes of related figures should first be converted to base-year (1913) equivalents, and then only the totals should be reexpressed in the current price level. This procedure cuts the work of computation almost in half. Yet it leaves all the material in much more nearly finished form for stabilizations as of later dates because such material has already been converted to base-year equivalents (which, of course, do not change—not, at least, as long as the base year used for the index series remains unchanged, and base years are changed very infrequently).

An example will make this clear. The data used are from the hypothetical case above, but for conciseness in presentation the end of the period is assumed to be December 31, 1934, and the end of the next period, December 31, 1935.

Base-Year Stabilization of Merchandise Inventory
As at December 31, 1934

Month of purchase	Description	Unstabilized	Index	Stabilized
C	(Each general kind of goods stabilized on this schedule is	$2,000	120	$1,667
F	described here.)	3,750	125	3,000
	Total	$5,750		$4,667

Current-Date Stabilization of Merchandise Inventory
As at December 31, 1934 and 1935

Date	Comments	Base-year amount	Current-date equivalent	
			Dec. 31, 1934 (Index: 150)	Dec. 31, 1935 (Index 000)
Dec. 31, 1934	(Here are entered any comments.)	$4,667	$7,000	$0,000

THE ACCOUNTING EXCHANGE

Consistency in Prepaid Expenses

It has been frequently contended that there is no such thing as prepaid interest. The main argument has been that the interest is not paid, for example when $1,000 is borrowed and only $990 is received. In fact, interest is not paid until the $1,000 is paid to the creditor at maturity. Even though $1,000 is received at the time of borrowing and a check is immediately given for the $10 interest, even though it may be drawn on different funds, the proponents of this idea indicate that the net effect is the same on the cash account, and therefore conclude that the interest has not been prepaid. The present value of the loan at the time of borrowing is $990. To avoid showing prepaid interest the original entry which would be made at the time of borrowing would be a debit to Cash for $990 and a credit to Loans Payable for $990. As the interest accrues and the maturity date approaches the debt would increase to $1,000. Entries or an entry would be made aggregating $10, debiting Interest Expense and crediting the liability account, so on the maturity date the total liability would be $1,000. Payment would simply involve the debit to Loans Payable and the credit to Cash for $1,000. It seems that two circumstances surrounding this transaction are influencing these persons. The first of these is the fungibility of cash, and the second, that the interest payment is made in kind. In this discussion fungibility refers to that quality of cash which makes every dollar the same as every other dollar. When $1,000 is borrowed that particular $1,000 does not have to be returned on the due date. Any $1,000 satisfies the debt. This is not true of a building which is rented, where the particular building rented must be returned at the expiration of the lease. Cash is designated by amount only, and any cash to the specified amount is as proper for business transactions as any other cash of the same amount. This is not true of other tangible assets. Cash is entirely fungible in this respect. When payment in kind is indicated it refers to the payment for the use of an asset in the same form as the asset used, as the payment for money borrowed with money, or the payment of rent for a building used in the form of another building. In the illustrations that follow the entire plea is for consistency with respect to other expenses. It does not seem consistent, if we grant the validity of the above point regarding interest, to isolate it as the only expense that may not be prepaid. Either interest may be prepaid or there are also other expenses which may not be.

A few illustrations will help in explaining these points. First, assume the ordinary situation of renting a building. Usually Rent Expense would be debited and Cash credited but in this situation a building is being borrowed and its use is being paid for by what is called rent. However, when money is borrowed an entry is made debiting Cash and crediting Notes Payable. It seems that it would not be entirely illogical to debit, let us say, Rental Building and credit, perhaps, Lease Payable, when renting a building. The Lease Payable account could be shown as an offset to the Rental Building account on the balance sheet. Theoretically we have the right to use the building the same as we have the right to use the cash or credit during the lease or loan period. The fact that cash is fungible, that any cash the same in amount may be returned at loan maturity, and the fact that buildings are not fungible, and may be returned only in exactly the same properties, cloud the issue but do not change it. We have no more real title to the cash received for the loan than we have in the building received for use. The question of real and personal property should not change the issue. Personal property, as well as real property, may be rented, and the points to be illustrated would be just as valid. The Loan Payable account represents the obligation to return cash at the expiration of the loan. The Lease Payable account represents the obligation to return the building at the expiration of the lease. This point will be used later, but it

certainly cannot be claimed to be illogical. If the rent for the entire lease period is paid at once it would be proper to debit Prepaid Rent and credit Cash. Suppose the rent is paid in kind, however, instead of in cash.

Suppose we lease a building for one year, the rent to be $1,000 for the year. The landlord agrees that he will accept a small building which we own in lieu of cash rent, title to this small building to pass at once to the landlord. For the sake of consistency with the borrowing transaction indicated earlier, when the building is leased an entry is made debiting Rental Building and crediting Lease Payable with, say $15,000, the value of the building. Now to pass title in the smaller building to the landlord in payment of the rent in advance there can be no objection to an entry debiting Prepaid Rent and crediting Building. When the lease has expired an entry will then be made debiting Lease Payable and crediting Rental Building. However, according to those who argue that interest cannot be prepaid, the entry debiting Prepaid Rent and crediting Building would be illogical since rent is paid in kind. To be consistent they must contend that a building with a present value of $14,000 has been received for use, and that the liability to return this building to the landlord gradually increases over the year to a value of $15,000. If we allow the proponents of this idea to use an entry debiting Rental Building and crediting Lease Payable, they will fall into difficulty if they attempt to be consistent. If we insist that they follow the usual procedure of omitting such an entry and recording only the payment of rent, their confusion cannot help but be still greater.

In the illustrations given above in one case money is borrowed, in the other case a building is borrowed. In one case interest is to be paid in kind, in the other rent is to be paid in kind. If they are both to be prepaid, is it not inconsistent to treat them differently? Is it any more correct to assume that interest is paid out of the cash received on a loan than it is to assume that rent is paid by giving part of the building received? Is it not just as logical to assume that interest is paid out of other cash as it is to pay out rent by giving another building? Are not the proponents of the idea that interest cannot be prepaid simply hiding behind the fungibility of cash? If interest cannot be prepaid because it is paid in kind, and therefore rent cannot be prepaid if it is paid in kind, how will these persons record the transfer of title to the small building assumed as rent payment in our above mentioned case?

Suppose the issue is brought a little closer by another illustration. Assume the landlord agrees, when the building is rented, that a certain improvement is to be made on the building, which improvement shall be accepted as rent. The improvement is completed within a month after the start of the lease. As the lessee pays out cash for the improvement, what account is to be debited? There will undoubtedly be no objection to debiting Prepaid Rent. Still from the landlord's point of view he has received no cash rent. He has loaned a building which has a certain present value, and he receives back, at the expiration of the lease, a building which is worth something more, the maturity value of the building. This case approximates very closely the one of loaning money. A present value is loaned, a maturity value is returned. Is there any reason for not treating loans and leases consistently? It may be said by some at this point that the lessee has experienced an actual expenditure while the borrower has not. This is not true. The lessee has expended cash for an improvement. The borrower has had to expend some other asset in order to obtain the cash with which he has paid the interest, since he has had to have additional assets to make up the interest difference. If we had a medium of exchange which was something other than cash, while cash might be simply another asset, this confusion would never arise. If in this case or the preceding one it is said that interest cannot be prepaid, is it any more logical to say that rent can be? Still if rent cannot be prepaid, how may the transfer of title to a building or the payment of cash for an improvement be properly recorded in the above examples? They cer-

tainly must be recorded when they occur.

It has been said that in the case of interest prepayments a loan may be terminated, by agreement, at any time so that a debit to prepaid interest at the time of the loan does not necessarily represent real prepaid interest. Is this not true of any contract? If rent has been paid in advance and the prepaid rent account has been debited, and if the lease is broken by agreement, the rent may be reduced as easily as the interest may. This is no more consistent than the other arguments. If interest cannot be prepaid because it may be reduced by prepayment of a loan, can rent be prepaid? It may be reduced by an agreed shortening of the lease. How then would the contendors for no prepaid interest record the payment of rent in advance and still be consistent?

The above cases have dealt with the payment of interest and rent in kind, and the possibility of reducing the expense charge by prematurely ending the contract. Let us now look at situations where payments in kind are not involved.

Suppose we wish to borrow $1,000 and we present our note to the bank for that amount. It is found that we have certain supplies on hand of which the banker is in need. He agrees that if we will turn over to him immediately $10 worth of these supplies he will give us cash or credit to the amount of $1,000. In this case we will, without fear of argument, debit Cash and credit Notes Payable for $1,000. Of course we will have to credit supplies for $10. What shall the debit be? Would it be wrong to debit Prepaid Interest?

Suppose we agree that Notes Payable should be charged in order to bring the loan down to its present value. Now, if the fiscal period ends, and adjustments are necessary before the loan has matured how shall we adjust? For convenience suppose that half of the period has expired. The present value of the loan is now $995. An entry would be made debiting Interest Expense and crediting Notes Payable for $5. This sounds correct, perhaps, but if we are consistent must we not treat all apparent prepaid items in the same manner? If the use of credit, when not paid for in kind, may reduce the present value of the liability and reduce its showing on the balance sheet in the case of interest, why should the same thing not be true of any so-called prepayment? And if rent is prepaid, if possible, why should it not reduce some liability to the landlord, which liability, at the time of adjustment would be increased to present worth at that time? When renting a building, why would it not be proper to debit Rental Building and credit Lease Payable? When the rent is paid in advance, why not debit Lease Payable (reducing it to present value) and credit Cash? At the end of a fiscal period, why not debit Rent Expense and credit Lease Payable?

The entire thesis here is a plea for consistency. There are such points to be kept in mind as time worn practice has substantiated. If this practice is wrong, it should be corrected. The fungibility of cash, or payment in kind should not confuse the issue.

If interest may not be prepaid the proponents of the idea will probably agree to the following entries for the following situation. On November 1, $10,000 is borrowed at 6% for six months, interest to be paid in advance. (To them a misstatement, but for practical purposes, rather common.)

Journal Entries

November 1

Cash....................	$9,700	
Notes Payable..........		$9,700

December 31

(Books to be closed as of this date)

Interest Expense..........	100	
Notes Payable..........		100

May 1

(Loan repaid)

Notes Payable............	9,800	
Interest Expense..........	200	
Cash..................		10,000

If this is accepted as correct, would not the following be consistent? On November 1 we rent a building with a value of $10,000 for six months. $300 cash rent to be paid in advance. (This should also be a misnomer to the proponents of the above idea in interest.)

Journal Entries

November 1

Rental Building	$10,000	
Lease Payable		$9,700
Cash		300

December 31

(Books to be closed as of this date)

Rent Expense	100	
Lease Payable		100

May 1

(Lease expired—Building returned)

Lease Payable	9,800	
Rent Expense	200	
Rental Building		10,000

If rent is paid in kind by giving another small building we own:

November 1

Rental Building	$10,000	
Lease Payable		$9,700
Building		300

December 31

Rent Expense	100	
Lease Payable		100

May 1

Lease Payable	9,800	
Rent Expense	200	
Rental Building		10,000

If an improvement is added to the old building in lieu of rent:

November 1

Rental Building	$9,700	
Lease Payable		$9,700

December 1

(Improvement completed)

Rental Building	300	
Cash		300

December 31

(Books closed)

Rent Expense	100	
Lease Payable		100

May 1

Lease Payable	9,800	
Rent Expense	200	
Rental Building		10,000

The least that can be asked of an accountant is consistency. Why should he take prepaid interest as a misnomer simply because cash is fungible and interest is paid in kind? If interest may not be prepaid, why may any expense be prepaid? If the above entries are correct for rent, it may be conceded that the above entries for interest are correct, but it does not seem consistent if they are both neither right nor wrong. Suppose that today we sign an agreement to pay back supplies to the amount of $100 for the present value of supplies to the extent of $90. Shall we charge Supplies with $90 and credit Accounts Payable with $90? Then sixty days hence shall we charge Accounts Payable with $90, Supplies with $10, and credit Supplies with $100? This seems as consistent as the treatment of interest that is suggested.

Let the accountant first be consistent. Then let him criticize present practice by entire classifications, not by one specific example of an entire group. Let him change and criticize the whole idea of prepaid items, not one of the group that happens to be easily confused due to fungibility and payment in kind.

Robert P. Hackett

The Dominion of Canada Companies Act, 1934

The new Dominion of Canada Companies Act, which came into effect in October of 1934, is a distinct advance on the law as it stood with regard to the prospectuses and the accounting of companies; but in so far as, so-called, "Distributable Surplus" is concerned, it only ameliorates a dangerous condition and does not remove it altogether. Of course, it must be remembered that it does not affect companies registered under the provincial companies acts, although both Ontario and Manitoba have incorporated "Distributable Surplus" in theirs.

The phrase "Distributable Surplus," used as it is in Dominion of Canada Company Law, is not a good one. Its meaning is limited to the surplus (or premium) contributed by shareholders, when paying for their no-par-value shares. "Contributed Surplus" would have been better, or "Paid-in Sur-

plus," because both capital surplus and earned (or revenue) surplus, both of which are specifically mentioned in this Act, are distributable under proper circumstances. This term is now associated in Canada with "no-par-value" shares and it is necessary for anyone interested in Canadian finance to understand this form of holding. The amount to be contributed when taking up these shares is not fixed, but may be changed from time to time as the letters patent, or by-laws provide, or as board of directors thinks fit. It is usually fixed by the directors. One can have different lots of no-par-value shares of the same class, all with the same rights, and representing the same equity in the company's assets, but whilst one lot may have been issued at $5.00 per share, others may have been issued at $6.00, $7.50 and so on. Each share represents the same fraction of the company's assets, or a section of those assets; and that fraction will be made up of capital plus profits or minus losses. In order to avoid complications it is forbidden to issue these shares with a preference as to capital or subject to redemption: shares, preferred as to capital, must have a fixed par value. After the rights of preferred shareholders have been provided for, the balance of the "Net Worth" of the company belongs to the holders of the common shares, each share representing a fractional interest. For example: if there are 30,000 common shares of no-par-value, for which considerations varying from $2.00 to $10.00 were paid, each share will represent 1/30,000th of this balance: if the balance of "Net Worth" is $150,000, each share has an equity of $5.00.

Under the Canadian Dominion Companies Act it is possible to divide up the consideration received for no-par-value shares, so that 25% of it can be allocated and credited to an account called "Distributable-Surplus." This account can be used for the writing-off of losses, the payment of dividends—dividends to preferred shareholders, if so decided by the directors, or in any other way that a surplus account can be used. Further, this allocation can be made retrospective, going back over many years, so that money, which the original shareholders probably thought was capital, when they were contributing it, can be transferred to "Distributable Surplus," and used for the payment of dividends or otherwise. Losses of capital can be got rid of in this manner, without following the usual routine prescribed. Of course, certain formalities have to be observed, the permission of shareholders and the approval of the Secretary of State obtained, and so on; and it is remarkable how strict, up to the present, the Secretary of State's department has been. But, what of the future, because it can make mistakes and be caught napping like anyone else? The Canadian Dominion Companies Act of 1930, the one which first introduced this idea of "Distributable Surplus," placed no limit on the percentage, which could be taken from the common shareholders and credited to this account. One company is known to have transferred over 80% of its Common Share Capital to "Distributable Surplus"!! At least, the present act has reduced the percentage considerably.

Of course, the issue of shares by a company for a figure, which will include "Distributable Surplus," is the same as issuing shares at a premium. There can be no objection to this in principle, provided that the company's history shows that it is earning such profits on its old capital, that they justify it in asking for this premium. But the danger lies in that it is possible for new companies, which have carried out no operations whatsoever, and whose power to earn any profits at all is quite unknown—for these new companies to issue no-par-value shares, 25% of the consideration for which can be credited to "Distributable Surplus" and used for the payment of dividends. As everyone knows, there are companies formed solely for the purpose of getting the gullible public to subscribe for a portion of their shares, while the promoters and their friends hold the balance. Then, by means of inflated inventories and other frauds, usually very difficult for an auditor to detect, profits are over-stated, large dividends are paid (really out of capital), market-prices for the shares go up, and the promoters and friends sell their holdings at high prices, leaving the

public with a concern, which in a few years time turns out to be bankrupt. Under Canadian Dominion Company Law this operation can be carried out without any inflated inventories or similar frauds. The large dividends can be paid out of "Distributable Surplus," quite legally. The only safeguards lie in the public studying the "Statutory Information" in prospectuses, and the annual accounts, and in attending shareholders' meetings and exercising their rights to the full; and, we know how many of the public neglect these things.

It has been pointed out that "Distributable Surplus" is desirable, where a holding company is taking over a subsidiary, the shareholders of which have not had a dividend for the period just closed. They are to be paid their dividend out of the "Distributable-Surplus" set up.

In point of fact, this dividend can be arranged for today, as it could prior to the introduction of "Distributable Surplus" or as it is under other legal systems, where they do not have it: the dividend can be paid immediately prior to the date of the purchase. It is granted that it should be possible to issue no-par-value shares at a premium, or with "Distributable Surplus," just as one can issue par-value shares at a premium, but this should only be legal after the company has carried out operations for at least two years, and proved by its accounts that it is on a profit-earning basis. At least, one can be put in gaol for publishing false accounts; whilst, under this law, it is perfectly legal to pay dividends out of "Distributable Surplus" even though not a cent of profits has been earned from the regular operations of the concern.

That is one side of the picture: let us now consider the safeguards for investors and shareholders. The requirements as to the information to be disclosed in a prospectus are now very wide and drastic, and contain such items as the following:

(1) the aggregate remuneration paid by the company during its last financial year to directors, and, separately, officers, who individually receive more than $10,000 per annum;

(2) the amount paid within the two preceding years for commission to the underwriters of shares or debentures;

(3) in the case of a company which has carried on business for less than one year the estimated amount of preliminary expenses;

(4) the securities which have been issued within the two preceding years, as paid for otherwise than in cash, and the consideration received by the company;

(5) particulars of services rendered, which are to be paid for out of the proceeds of the issue;

(6) particulars of the nature and extent of the interest of every director in any property acquired by the company within the preceding two years;

(7) the length of time during which a company has carried on business, if it has done so for less than three years; and, if it is acquiring an interest in a similar company, again the length of time during which it has actually carried on operations;

(8) in the case of an issue of shares, the names and addresses of any persons, who are in a position to elect a majority of the directors.

These are examples: there are twenty-four paragraphs, or over three and a half pages of these requirements. It is further provided that this information shall be contained in a separate part of the prospectus commencing with the words, "Statutory Information," in conspicuous type, and "the said information shall be set out in type at least as large as that used in the body of the prospectus."

The accounting requirements of prospectuses are equally wide and stringent. An audited balance-sheet must be published not only of the company itself, if it has carried on business for more than a year, but also of any subsidiaries, similarly. An interesting requirement, where a subsidiary has been acquired, is to show the value of moneys and assets distributed by the subsidiary, otherwise than in the ordinary course of business within six months of such acquisition.

With regard to profits and losses of the company and its subsidiaries the auditor

must report on their nature and source for the three preceding years, or for less, if the company has been in business for less than that period. The same must be done for a business, which it is intended to purchase out of the proceeds of the issue, directly or indirectly.

The audited balance sheet must contain proper statements covering the following:

(a) cumulative dividends in arrears;

(b) the manner in which fixed assets have been valued, with the name of any appraiser and date of his appraisal;

(c) if the auditor considers the reserves for depreciation and bad debts to be inadequate (surely this provision regarding depreciation throws on the auditor a responsibility, which properly belongs to an engineer or appraiser);

(d) the manner in which the inventories or stocks-in-trade were valued, and if at a figure exceeding market value.

As regards profits, the auditor's report must show separately any "non-recurring" profits, and must exclude unrealized profits. In Canada not only is there income-tax paid by the individual, but there is a special income-tax for companies; accordingly the auditors' report must show the net profits *after* income-tax has been deducted.

There are the usual liabilities for damages if there are false statements in the prospectus, and also saving clauses for persons named therein, without their consent. There are the usual rules and penalties connected with filing copies with the Government.

Most important to the investor, however, are the following:

(a) Every company is forbidden to accept any application in respect of any securities offered by it, unless a prospectus has been in the hands of the applicant at least twenty-four hours prior to the acceptance. If this has not been complied with, the applicant can rescind his offer within thirty days from the receipt of notice of allotment, and demand his money back. Also there are heavy fines for those culpable in any contravention of this rule.

(b) The offer of shares or debentures must be made within thirty days of the issue of the prospectus. If during the offer the company enters into any transaction, otherwise than in the ordinary course of business, and of a nature or effect, which would require it to be included in a prospectus or such that the original would be misleading, then a new prospectus must be issued within twenty days of the transaction. Until this new prospectus has been issued, the company must desist from its offering.

(c) It is unlawful to call at any residence for the purpose of offering securities of a company to the public. The word "call" includes a telephonic communication. The penalty for this offence can be 12 month's imprisonment and a $1,000 fine for all to blame, and all directors and managing officers of the company "shall be guilty of the like offence unless he proves that the act constituting the offence took place without his knowledge or consent."

Unfortunately, these provisions regarding the prospectus can only go as far as underwriters, although this term has been given a very wide definition. They cannot affect people, who acquire the shares in full ownership, and then offer them for re-sale. The wise thing would always be to ask for the most recent prospectus of a company, and to study carefully the "Statutory Information" and audited accounts.

The requirements regarding the accounts to be laid before the annual meetings of shareholders are now very full, and the auditors' responsibilities are greater than ever. The balance sheet must be drawn up so as to distinguish severally, at least, such classes of assets and liabilities as the following:

(a) cash;

(b) debts owing to the company from its directors, officers, or shareholders respectively;

(c) other debts owing by the company;

(d) inventories of merchandise, etc., stating the basis of valuation adopted and the manner in which such value has been determined;

(e) expenditure on account of future business, if any;

(f) lands, buildings and plant, stating the basis of valuation, whether cost or otherwise, and, if valued on the basis of appraisal, the date of appraisal and the name of the appraiser;

(g) the aggregate amount of any outstanding loans to employees;
(h) debts owing by the company;
(i) liability for taxes imposed by any taxing authority in Canada including amounts owing in respect of such taxes due and payable and amount or estimated amount of the liability for such taxes in respect of the fiscal period covered by the statement of income and expenditure;
(j) the amount of shares of each class issued and outstanding and the amount paid thereon, showing the amount thereof issued since the date of the last balance sheet for services rendered, for commissions or for assets acquired since the date of the last balance sheet and if any redeemable preferred shares have been issued a sufficient description of such shares to indicate that they are liable to be redeemed;
(k) indirect and contingent liabilities;
(l) the amount or amounts of existing reserves for depreciation, obsolescence and depletion;
(m) the total amount received upon the issue of shares in the capital stock which is attributable to capital;
(n) the total amount received upon the issue of shares in the capital stock set aside as distributable surplus or any unappropriated balance thereof;
(o) the total amount of money provided for purchase of shares by employees.

In addition the following must be stated under separate headings, so far as they are not written off:—
(a) the preliminary expenses of the company inincurred after the date of the coming into force of this Act or within a period of three years prior to said date;* and
(b) any expenses incurred in connection with any issue of share capital or debentures; and
(c) if it is shown as a separate item in or is otherwise ascertainable from the books of the company, or from any contract for the sale or purchase of any property, the amount of the goodwill, franchises, patents, copyrights, trade marks, leases, contracts and licences as so shown or ascertained.

* The question at once arises: why did the act not mention the preliminary expenses of more than three years ago and still not written off? Of course, the Act *intends* the whole not yet written off.

There is a weakness in that "goodwill, patents, etc." are to be shown as a separate item, *if* the amount is ascertainable from the books, or any contract of the company. Previously, the Dominion Companies Act simply stated bluntly that it had to be shown separately; people had to make their contracts and other arrangements accordingly.

The statement of income and expenditure for the period under review must show as a separate item the full amount of remuneration paid to the directors, for their services in that capacity; salaries received by directors as managers or officers are excluded from this. This statement must bring out clearly the net profit from regular operations, and then, afterwards, "non-recurring profits and losses including profits and losses of a special nature," income from investments, amounts written off goodwill, interest on funded debt such as debentures, income tax for the year, and so on. The amounts written off for depreciation and depletion must, if not shown already, be given as a footnote. The balance of the statement must show the net profit or loss for the financial period under review taken by itself.

In the case of a holding company and its subsidiaries, if a consolidated balance-sheet and income and expenditure statements are not given, and the balance sheet and statements of the holding company alone are shown, there must be an audited statement showing how profits and losses of subsidiaries have been dealt with or provided for in the holding company's accounts. Again, in such a case, if the auditors' report of a subsidiary contains a qualification, particulars of it must be included in the auditors' report on the holding company. The whole matter of holding companies and their subsidiaries has been dealt with very thoroughly, although, of course, as for other matters of company legislation, not finally.

With regard to the profits and losses carried forward from previous years, and the disposal of profits and losses of the year under review, there must be a special statement—a statement of surplus, showing separate accounts for capital surplus, "distributable-surplus," and revenue or earned surplus respectively. This statement must show:

(a) balances from previous periods,
(b) adjustments affecting previous periods,
(c) the final balance carried from the income and expenditure statement for the period under review,
(d) dividends,
(e) any other appropriations.

These must be shown for the three accounts separately. This should prevent the covering up of losses made in the period under review by swelling its profits with those of previous periods.

These statements, with the auditors' report, and "such further information respecting the financial position of the company as the letters patent, supplementary letters patent or by-laws of the company requires"; must be laid by the directors before every annual meeting. Shareholders, who exercise their rights and can and will attend the annual meetings of companies, should have no reason to complain of lack of information regarding their companies' financial position. One wonders, however, how many shareholders have that knowledge of accounting which, at least, every business man should possess, and which will enable them to understand these statements properly.

Incidentally, the auditors are given the right to attend meetings of the shareholders, at which any accounts audited or reported by them are to be laid before the meeting, so that they can make any statement or explanations they may desire. However, attendance on the part of the auditors is optional, and, after all, the proper people to make explanations to the shareholders are the directors.

On the whole, especially so far as the company prospectuses and the audited accounts to be laid before the annual meeting of shareholders are concerned, this act is a distinct step forward; but, so far as "Distributable-Surplus" is concerned the step forward has not recovered all of the ground lost in the Canadian Dominion Companies Act of 1930.

A Canadian Accountant

BOOK REVIEWS

Money and Banking in the United States. Louis A. Rufener. (Boston: Houghton Mifflin Company, 1934., Pp. xviii, 788. $3.50.)

Dr. Rufener explains, in the preface, that his purpose in writing this volume is to "... give fairly adequate answers to ... questions ... asked by millions of American citizens on or about July 1, 1934" respecting money and banking, and to show that the answers will be found in "... critical discussion of the principles of money and banking in the light of their application in the developing banking and currency system of the United States throughout our national history." In performing his task the author has really written a treatise on money, for he has omitted "... detailed descriptions of all financial institutions not directly concerned with currency problems."

The first five of the 29 chapters deal with monetary principles and, in the fifth, "The Quantity of Money and Prices," he accepts the quantity theory provided it "... be adjusted to or corrected for abnormalities of the business cycle." In other words the views of Fisher and his followers hold for the normal value of money, but not for the cyclical. It is unfortunate, therefore, that Dr. Rufener gives but little attention to these English economists who have developed the "unspent margin" approach.

Chapters 6 to 9, inclusive, discuss bimetallism and paper money. In connection with the former he brings in material contained in no other text known to the writer and the treatment of the greenbacks is in line with the best modern research. Chapters 10 to 21, inclusive, analyze the monetary functions of banks from the time of the first Bank of the United States to the Federal Reserve. While the exposition is at times somewhat labored the fault is quite pardonable in a text. Moreover the treatment is vitalized by fearless statements of fact, e.g., the elaborate provision for rural credit "... has tended to overemphasize the importance of special credit facilities." The excellent discussion of the two Banks of the United States fails to place sufficient responsibility for their downfall upon the state banks, but the chapter on "Central Banks" adds much to the value of the book and it contains a number of vigorous statements, e.g., "A central bank superimposed upon a National Banking System already too sound for the comfort of inflationists was to be opposed by every adherent of the doctrine that the American business man and farmer have an inalienable right to borrow unlimited amounts of money at a nominal rate of interest to be used for whatever purpose they desire, and that it is the duty of the Government to provide a monetary system that will meet these requirements." Again, in discussing "Functions of the Federal Reserve System," he takes a firm position on a controversial subject, "... the best security against disastrous inflation of credit lies in the restriction laid upon the total amount of credit expansion rather than in restrictions upon the purposes for which credit may be extended." Obviously, this is an empirical approach but not without justification. Speaking of the Federal Reserve again, under "Setting the Stage for Inflation," he holds that that system has "... on the whole in the most fundamental respects ... been a flat failure." This position is also highly controversial, but the frankness is refreshing. Again, "... there is ample evidence ... that the financial storms which have well-nigh wrecked our banking system were in a large measure brewed by the responsible banking officials themselves." As for the Federal Reserve Act as a whole, "... no more effective instrument for inflation could have been devised by the most irrepressible inflationists in history." However, the statement, like most others, is well supported with statistical data.

The second period of inflation under the Federal Reserve, ending in 1929, went quite unchecked and "In no responsible quarter was effective action taken while the time was ripe for action—not by the big bankers, the officials of the reserve banks, nor by the Federal Reserve Board." The capitalists pulled down their house of cards on their own heads. Nor is he less critical when he comes to deflation for, "... the policy of meeting the declining demand by restriction of output rather than reduction of prices was mainly responsible for the tremendous unemployment ... that marked the period" from 1929 to 1932. The major causes of the depression are found in industrial maladjustment and the unwillingness of recipients of income to spend. The sweeping condemnation of the activities of affiliates seems rather difficult to sustain, (p. 706) but the writer quite agrees that restriction of branch banking, while permitting group and chain banking a free hand, is utterly indefensible.

When he comes to "Our New Monetary System," Dr. Rufener appears to take middle ground. Thus, he is not highly critical of the views of Professor Warren though he does call attention to certain inherent weaknesses notably, Warren's belief that there is a close correlation between the weight of the dollar and the price level and his failure to take into account modern methods of economizing gold. Yet, the economic policy of priming the pump meets the author's approval—"... the pump seems to have been primed and to show signs of functioning in a fairly satisfactory manner." Furthermore, "... devaluation seems to have been the best way out of a serious difficulty." Unfortunately the supporting argument is rather thin. He finds "The gravest objection to our new monetary policy ... in the possibilities of inflation." and the "... most dangerous factor in the present monetary system is the factor or of inconvertibility of the paper currency into gold." Right to the end of the book Dr. Rufener distrusts a purely managed monetary system and he prefers what Hirst calls a "knave proof and a fool proof" system since there is nothing in American experience to justify any other choice.

Taking the book as a whole, it must be said that Dr. Rufener has done an exceptionally good piece of work. The title is somewhat misleading, since he has really written a treatise on money in the broad sense,

and there is some deficiency of monetary theory. But there is substantial foundation of historical material with a combination of deductive, historical and statistical methods which results in an excellent text. Moreover, there is much originality and one never lacks for information as to where the author stands. In addition, the treatment is full enough to support a course which is not, like the usual course on money, too thin. The strength of the book lies in the emphasis placed upon our monetary experience for thereby the author throws much light upon the sort of a monetary system most likely to serve the interests of the United States to the greatest advantage.

E. A. Kincaid

University of Virginia

The Supply and Control of Money in the United States. Lauchlin Currie. (Cambridge: Harvard University Press, 1934. Pp. xvi, 199. $2.50.)

Under the above title Dr. Currie has contributed to the Harvard Economic Studies, Vol. XLVII, but in doing so it was not his purpose to write a text, though it is his hope that "... the study will be useful to teachers ... in other colleges as ... there is at present no adequate treatment of the supply side of money." However, "This book ... does not pretend to have exhausted the subject, as it is concerned largely with principles" and it will be found "... rather severely critical of our banking system and its administration," even though an attempt has been made to submit only constructive criticisms.

Dr. Currie feels that too much importance has been attached, in the past, to variations in the supply of money, but there is now danger that the pendulum will swing too far in the opposite direction. Moreover, recent studies have generally stressed the rate and type of spending to the neglect of conditions of supply. Therefore, "This study is an attempt to repair, in part, this neglect." But the real objective is to inquire into the basis for the skepticism as to the effectiveness of central bank control of the quantity of money which should be effective in a situation such as 1931–33 presented.

Upon such a background the author enters upon a discussion of "The Concept of Money" and he explains that money is to be used as broadly synonymous with means of payment or, more technically, those instruments possessed by the public by delivery of which debt contracts and price contracts are discharged. Dr. Currie, having made every effort to obtain correct figures as to the total money supply, takes up the Monetary Theory vs. The Commercial Loan Theory of Banking and holds that the chief task of the central bank is "that of controlling the supply of money" and "This view we may call the Monetary Theory of Banking." On the other hand, the Federal Reserve Act and Federal Reserve policy are to be interpreted from the point of view of the Commercial Loan Theory. Arguments in support of the latter are analyzed and found wanting and he concludes that "... there exists no valid theoretical justification for the Commercial Loan Theory of Banking." This conclusion is based mainly upon pragmatic considerations and has therefore only such validity in principle as that basis gives. But it permits the author to justify diversion of central bank credit to speculative purposes. It is therefore logical to find him saying, "As long as the reserve administration conceives its task as that of the qualitative control of bank assets, the best work of the monetary theorists cannot fructify in actual banking policy, and it is futile to seek to enhance the effectiveness of central bank control over money" (p. 45). If this be granted and qualitative control be sacrificed then we must have a banking system with powers which no banking system in this country at present can safely have.

In any case, it is essential to define the concept of credit and this is the purpose of Chapter V. The reserve administration took credit to mean loans and investments and, hence, "To compare the growth of credit in the reserve administration's sense—with the growth of production ..." is practically useless, for "loans and investments ... grossly exaggerate the rate of expansion of the money supply up to 1929 and minimize the contraction from 1929 to 1931." Yet there is evidence that the movements in money supply played no part in Federal reserve policy while ... important decisions were based upon movements of loans and investments." Moreover, it does not appear that "the movement of demand deposits played any rôle in the deliberations of the officials and it is not surprising to find that in 1931 and early 1932 "... the reserve authorities acquiesced in one of the most catastrophic contractions of demand deposits we have ever experienced." The reserve administration "... is not in the slightest degree interested in credit in the sense of the means of payment."

Then comes an analysis of "Reserve requirements of Commercial Banks" in which it is argued that it is the function of reserves to control the volume of money in the form of deposits subject to check. That being the case there should be some uniformity of relationship between reserves and demand deposits. Unfortunately no such uniformity exists. Consequently "... an increase in utilized reserves may correspond with almost any multiple expansion or contraction of money"; hence "... the important thing for control is the required percentage reserve against a new increment or decrement of deposits." Since this required percentage reserve varies "enormously" how about the other variable—the volume of member bank reserves? The instrument of control is the discount rate and the effectiveness of that rate per se depends upon the profit motive of member banks. Dr. Currie is thus led into analysis of views advanced by Dr. J. S. Lawrence. With these views he disagrees and concludes that "... a rediscount rate higher than the rate at which a substantial part of bank loans are made would be sufficient to check borrowing." But available data do not support the view that a multiple expansion of deposits occurs when the rediscount rate is lower than the rate at which banks can safely lend. Therefore, the real check on member bank borrowing is found in the unwritten law against permanent member bank indebtedness to reserve banks rather than the rediscount rate. The volume and character of member bank in-

debtedness is presumptively the most important single factor in determining the movement of net demand deposits, and Dr. Currie finds it more sensitive to open market operations than to the rediscount rate. But not all banks are equally sensitive to the tradition against indebtedness to their reserve banks.

A short discussion of gold reserves is followed by "The Problem of Note Issue," and that, in turn by "Excess Reserves." In connection with the latter, he remarks, "If bank assets were confined to commercial loans . . . there would be no reason why the decline in loans and the contraction of money should ever cease in the downswing" of the cycle. Consequently, he hopes that non-bank security (boot-leg) loans will increase in the future (p. 121). Moreover, from the viewpoint of control investments are the ideal assets. Finally, ". . . the demand for loans does not impose a very serious limitation upon the volume of deposits," hence business stability through monetary action must be achieved before a depression becomes a disaster. A system of unit banks requires a higher reserve ratio than a branch banking system, a matter of significance for control of credit. As for elasticity of Federal reserve credit, it is perverse, a condition which should be remedied, but in spite of this and other weaknesses the system has sufficient power to vary the supply of money within fairly wide limits. Indeed, in 1929–32 the reserve banks were not so powerless as was currently believed, for the policy of the system was one of ". . . almost complete passivity and quiescence." The drastic contraction of money from 1929 to 1932 proceeded automatically with no real effort made to offset it.

"Ideal Conditions for Control" are stated and then come "Suggested Improvements in the Existing System." Among the latter,—". . . the reserve administration must become convinced that the thing it should control is money." There should be greater concentration of authority and a small group charged with the study and formulation of policy. Greater publicity as to acts of the Board would also help, particularly if individual members of the Board were required to file opinions in writing. The last two chapters contain specific "Suggestions for Enhancing the Effectiveness of Control," with respect to (a) the reserve ratio, and (b) the volume of reserves.

Dr. Currie's treatment of the subject is essentially deductive, a method in which he excels. Hence, if one grants the validity of his major premise, that managed money is the only logical course, and agrees that he has demolished the Commercial Loan Theory of banking there is nothing to do but go along with him, assuming, of course, that the present system can be so "corrected" as to apply his theory effectively. However, when one recalls the vigorous defense of the Commercial Loan Theory they made by Willis,[1] the weaknesses in the managed money theory brought out by Hardy[2] and Haberler[3] and the presence of political influence or the fear of it brought out by Harris[4] one cannot accept his conclusions. But it should be said that Currie would maintain that any effort to adopt the Commercial Loan Theory would necessitate its rehabilitation which would, in turn, involve going back to conditions to which we cannot return. If so, then, perhaps logic is with him. In any event, Dr. Currie has rendered a distinguished service to monetary theory and students of monetary economics should study this volume with thoughtfulness. Should they do so, they will not fail to feel the challenge of Dr. Currie's vigorous defense of his position, even though they may be unable to conclude that monetary management in America under attainable conditions is desirable.

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[1] Contemporary Banking, Willis, Chapman & Robey.
[2] Credit Policies of the Federal Reserve System.
[3] Harris Memorial Foundation (Gold and Monetary Stabilization).

American Treasure and the Price Revolution in Spain, 1501–1650. Earl J. Hamilton. (Cambridge: Harvard University Press, 1934. Pp. xxxv, 428. $4.50.)

"Pouring into Europe in a mammoth stream, American gold and silver precipitated the Price Revolution, which in turn played a significant role in the transformation of social and economic institutions in the first two centuries of the modern era." This is the problem to which Dr. Hamilton's study is addressed. Precise measurement of the effect of American treasure upon Spanish prices and wages required the examination of documents in national and municipal archives in Spain and to this task the author devoted forty-two months of exacting investigation with highly significant results.

These in three parts of which the first, Money and Treasure, includes four chapters, the second, The Price Revolution, eight chapters, and the Appendices eight more. There are also numerous tables and charts along with a bibliography. The original purpose of the study was ". . . to ascertain the precise quantities of America gold and silver imported into Europe through Spain from 1503 to 1660 and to examine the effects of the treasure upon Spanish prices, wages and economic welfare." But, as the project developed it was found possible to throw light upon a number of subsidiary problems including (a) the ". . . age-old and recondite problem of Spanish economic decadence," (b) the future theory of the business cycle, (c) the relation of the quantity of money to prices and (d) the actual facts with respect to Spanish prices.

As for the findings, reference may be made only to the more important. ". . . the imports of American gold and silver into Europe during the sixteenth and the early part of the seventeenth not only raised prices to approximately the level at which they stood during most of the eighteenth and nineteenth centuries, but raised the mint ratio of gold to silver from approximately 10.00 to 1, a point toward which it had gravitated for several centuries . . . , to the neighborhood of 15.50 to 1, the approximate center of oscillations of the next two centuries." Under the topic, "Vellon inflation in Castile," the author makes one of his most interesting

[4] Harris, S. E. Twenty Years of Federal Reserve Policy.

contributions, showing that, "Vellon inflation prolonged into the seventeenth century the great Price Revolution generated by the influx of American gold and silver in the sixteenth." Moreover, vellon inflation was "... one of the most powerful factors in the economic decline of Castile." Speaking of Valencian money, the author observes that "... in 1641–50 the coinage more than doubled that of the entire sixteenth century, which witnessed the greatest proportional increase in the supply of silver the world has even known."

In taking up "The Price Revolution," Dr. Hamilton first treats weights and measures thereby conveying a definite conception of the difficulties under which he labored when he came to the task of measurement so well presented in the two following chapters. Here he shows that the Price Revolution definitely began with the opening of the sixteenth century and in addition he calls attention to certain "... uncritical deductions from inadequate data which have made their way into historical and economic literature ...," particularly those of Prof. Merriman. But, "The outstanding phenomenon revealed ... is the almost incredibly close agreement among the regional index numbers of prices." In the first half of the sixteenth century "... prices more than quintupled in Andalusia, more than quadrupled in New Castile, but rose only about 3½-fold in Old Castile and Valencia." The repercussion of the Price Revolution in other European states is also examined. It is evident that the author has done an excellent piece of statistical work when allowance is made for all hazards in data. This is all the more evident in his analysis of "Group Price Movements" and here he goes into the effects of the legal maximum prices of grain, a subject of present significance. As for the effect of the Price Revolution upon wages, it is said that the great streams of treasure "... spelled unremitting economic retrogression for wage earners...."

There follows the final chapter, "Why Prices Rose" where it is said that "Prolonged search of contemporaneous public records has disclosed no references, nor even allusions, to the influx of American treasure as a contributory cause of the Price Revolution." But, it is pointed out that Bodin "... was the first to demonstrate by careful analysis that the American mines were the principal cause...." Moreover, certain Spanish writers accounted "... for the advance of prices in terms of the American mines ..." but none of them explained the mechanism through which the increase in the quantity of money operated. Dr. Hamilton definitely concludes that the advance in commodity prices, "... particularly from 1535 on, demonstrates beyond question that the 'abundant mines of America' were the principal cause of the Price Revolution in Spain." But the increase in prices in Seville, the recipient and distributor of legal imports of treasure, was not commensurate with the increase of treasure, since the imports were "probably more than twice—possibly as much as four times—as great as the advance of prices ..." there, and Dr. Hamilton takes up the causes for these differences.

Appendices of ninety-four pages include data of much value in measuring the extent of the researches and the problems confronted and when these are fully comprehended one cannot do less than say that Dr. Hamilton has done work of a quality which measures up to the high standard set by the preceding volumes in the Harvard Economic Studies. From the point of view of this reviewer, the value of the work would have been enhanced if there had been included in the work a clear discussion of the monetary systems of the several Spanish states and this applies particularly to the excellent discussion of Vellon Inflation.

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Corporate Earning Power in the Current Depression. William Leonard Crum. (Boston: Harvard University Bureau of Business Research, 1935. Pp. 17. $.50.)

Despite all that is said about corporation profits and the attention given to profits in the analysis of particular corporate securities, it is only recently that we have had the kind of comprehensive studies of profits that are now appearing. The work of Professor Crum during the last few years has helped to meet a long felt need for a comprehensive view of the trend of corporate earnings.

In the first part of this study he follows the plan, laid down in his previous studies, of analyzing corporate earnings by the use of corporate income tax data. These, unfortunately, do not give as much information as a complete study of profits would require, hence the author relies largely on the ratio of net profits (statutory income less Federal taxes) to gross income (gross revenues plus other income). This ratio is one that is probably peculiar to studies based on income tax data. It is somewhat analogous to the accountant's "margin of profit," or the ratio of net operating income to gross operating revenues but differs in that statutory net income is what is left after adjustments have been made for capital gains or losses and interest payments have been deducted, and also in that gross income contains some net as well as gross items. Since the author deducts Federal income taxes as well, his profit ratio is substantially the ratio of net profits (excluding nontaxable interest and dividends) available to the stockholders to gross income. The limitations upon such a ratio are obviously great, but Professor Crum is usually conscious of the fact that he is working with a measure that falls far short of giving a true picture of the return to capital or of what the economist would call profits. Because of differences in rates of capital turnover in different industries it is an unreliable index of the relative profitability of capital investment in different fields. Because of different capital structures, it is not an adequate basis for comparison of the returns to capital as between industries or even as between firms in the same industry. What then is its use? Professor Crum uses it as a measure of the extent to which earning power was cut by the depression. This involves a comparison of the results in each industry from year to year, and is valid as long as it can be assumed that three disturbing elements—capital turnover, capital structure, and capital gains and losses—maintain their relative

positions in each industry from year to year. If not, the profit ratio is not only a very rough measure, but may be a misleading one as well. This, of course, would be more likely to be a questionable assumption if the period over which comparisons are made were longer, so as to bring greater likelihood of change in one or all of these factors. As presented, the ratio is traced for all corporations and for six separate groups from 1919 to 1933—a period which may or may not have seen great change in these respects. The greatest danger is perhaps that the ratios will be used without appreciation of the limitations, even though the author spreads caution rather generously through his pages.

There is an unmistakable decline in the profit ratio of all corporations during years of depression, all corporations reporting a sizable negative profit in 1921 and 1931, a large negative profit in 1932 and a small negative profit in 1933. Although profits were shown in all other years, they tended to be below a 4 per cent level during the twenties as against 5.64 per cent in 1919. Is this evidence of "profitless prosperity" during that period? Or is the 1919 figure for some reason unrepresentative? Or did the three disturbing elements, previously mentioned, bring a lack of comparability? These interesting questions arise, but we cannot criticize the author for not answering them because that was not his purpose. Furthermore, it is doubtful if the requisite information is available in the *Statistics of Income*.

Equally interesting are the data presented to show the developments in each of six industrial divisions—agriculture, mining, manufacture, construction, trade, and service. The diverse effects of depression on the six divisions is clearly apparent, with agriculture (such as is incorporated) and mining showing the poorest record over the period, manufacture the best, while trade, although not affected as seriously by the depression as were other lines, showed a gradually decreasing profit ratio over the period as a whole.

Perhaps the most valuable data worked out and presented are those showing profit ratios of sub-groups of larger groups. Thus, manufacture is divided into 13 groups—metals, foods, textiles, etc. and these are broken down into sub-groups—metals into 13 groups; foods into 7 groups, etc. Ratios are presented for the larger groups for the period 1919 to 1933 while those for the sub-groups are presented for the years 1926 to 1932 inclusive. Non-manufacturing divisions are treated in the same way. No summary of the results will be attempted here. It is sufficient to note that the author finds in the course of profit ratios support for the generally accepted notion that producers' and durable goods industries are more seriously affected by business depression than are other industries. There are, of course, exceptions, but these he explains by special circumstances in the industry. One might be inclined to quarrel with his classification of some industries—for instance, tire manufacture as producers' goods (page 8)—and might note a rather large number of exceptions, but in general his conclusions seem to be warranted by figures developed.

In the second part of the study Professor Crum, after reviewing the defects of the profit margin, presents more adequate data relating to the return on capital in different lines of economc activity for the years 1931 and 1932. Lack of data in income tax reports prevents this more adequate analysis before 1931. Refinement of the data by correction for one, some, or all of the following: capital gains or losses, interest paid, salaries paid to officers, and income tax payment yields a much more satisfactory measure of the returns on capital invested. Capital invested is taken to be either adjusted total assets or net worth. Various combinations of profit and invested capital figures involving no less than eight separate formulas for calculating the return to capital are used and the results for the two years are presented. In a comprehensive table will be found the results for whatever may be one's concept of the return to capital. A study of the relationship between these and the profit ratios of the first part was not made, but would seem to hold interesting possibilities. In general, the second part of the study confirms the conclusions reached in the first for the two years it covers.

A supplementary note on the reliability of preliminary tax data is given.

This monograph is an important source of valuable information concerning corporate profits during the period covered.

C. C. Bosland

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Corporation Finance. Floyd F. Burtchett. (New York: Harper & Brothers, 1935. Pp. ix, 1078. $4.25.)

Back in 1910 when the first edition of Mead's Corporation Finance appeared there were few competitors in the field. The subject was relatively new in the curricula of the schools of commerce and Mead's text did valiant pioneer service. During the World War, Dewing's Financial Policy of Corporations appeared and materially strengthened the textbook treatment of the subject and this is especially true of its revised editions. Moreover, it carried much source and reference material that reenforced its excellent organization and attractive presentation of subject matter. But Dewing's treatment was rather weak on the accounting side and it remained for Gerstenberg to bring out a text, "Financial Organization and Management" without this defect. While other texts have appeared these three have continued to be the supporting texts for courses in Corporation Finance until recently.

Now comes Burtchett's "Corporation Finance" with the most exhaustive treatment of the subject yet presented in textbook form. The author has succeeded in combining the fundamental outline as laid down by Mead, the method of including valuable reference material in footnotes as developed by Dewing and the careful consideration of accounting aspects of the subject peculiar to Gerstenberg. However, he does not have the excellent expository style of writing that characterized Dewing's work, nor does his book have all those features of a good text that characterize Mead's work. His style and method of presentation are more like Gerstenberg's with a combination of valuable supplementary material in footnotes as developed by Dewing. Perhaps the outstanding general character-

istic of Burtchett's work is the full and careful consideration of relevant court decisions, together with stress on the social approach. However, Burtchett does not set forth the social position of the corporation as clearly as does Dewing in his "Corporation Securities" and it seems to this reviewer that this feature might well be strengthened when the book is revised.

The corporation has been the chief device whereby capitalism has functioned and capitalism, in turn, has been the agency for the effectualizing of industrialism. The impact of the strong trend to industrialization upon capitalism and its impact, in turn, upon the corporation is subject matter which no modern treatment of corporation finance can afford to slight. The effort of Burtchett in this direction is to be commended and this is also true of his conviction that legal interpretation of lawyer-written corporation laws deserves a large place in such a text. He makes it evident that both the accountant and the economist have made large contributions to that body of learning which may be described as corporation finance, but he does not fail to make it clear that unsocial methods employed by corporations and exposed by the economist and the accountant have been fostered by corporation lawyers who are without training in either economics or accounting. Moreover, progress in the reform of corporation practice in the field of finance cannot go far until the obstacles set up by corporation lawyers are removed and this also applies to those corporation lawyers who have found places on the bench. Hence there is need for a considerable emphasis on the law of corporation finance in every text on the subject and that emphasis should include more than an explanation of the effect of decisions upon corporate procedure; it should also refer to the social philosophy that underlies the decisions. It is because these things are made clear that Burtchett's book is a welcome addition to the literature of corporation finance.

With these general characteristics of the book in mind reference may now be made to special features. The fifty chapters are grouped to form eight parts of which only one is unique, namely, Part VIII, "Social Aspects of Corporation Finance." But, there are several chapters in other parts of exceptional value. Thus the treatment of par-values, employee stock ownership, privileged subscriptions, financial statements, surplus and dividend policy, lease and direct ownership expansion, poly-corporate expansion, illegal combinations is of exceptional merit and this is true because the author has relied very little upon other texts for material but rather has gone to source material, chiefly court decisions, and has thereby found it possible to treat these subjects in an original way. It is to be regretted that the treatment of certain topics is so condensed as to form rather heavy reading. Because of this the text will be found most suitable for those colleges and universities where the course extends beyond one semester or where the course is open to only the more advanced students. Indeed, Dr. Burtchett would have done well had he written in a more open style and expanded certain subjects even if the result were a larger volume or even two volumes. Many a good book has been weakened by the effort to make it a suitable text for a one-semester course in a small college. But, after due allowance is made for the deficiencies it must be said that the author has made a contribution to the literature of corporation finance and therefore, to the literature of the corporation as an economic agency.

E. A. Kincaid

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Economic Reconstruction. Report of The Columbia University Commission. (New York: Columbia University Press, 1934. Pp. xv, 250. $3.00.)

President Butler in December 1932 appointed a commission of economists to confer and to deliberate on the economic emergency then existing and to discuss especially the following topics:

1. Analysis of the part played by the price system in the direction of production.
2. Analysis of the fluctuating relationships of income, investment, and consumption within the present price system.
3. Examination of price controls to maintain stability (a) of internal prices and (b) of international exchange parities in periods of industrial expansion and retraction.
4. Examination of the adequacy of present monetary systems under modern industrial conditions.
5. Examination of the economic consequences of improvements in productive technique.
6. Formulation of consequent policies.

The report falls into two divisions: A General Report prepared as a result of the deliberations of the Commission as a whole; and a series of special reports prepared and signed by individual members on sub-committees, supplementary to the General Report.

The General Report carries 12 recommendations, of which the more important ones appear to be:

1) The codes of the N.R.A. should not limit output.
4) Measures should be taken to maintain an equilibrium in the cost-price structure and between saving, consumption and capital expansion.
6) Public Works programs should as a permanent policy be planned and budgeted to serve as a stability influence.
7) A further step recommended is the establishment of a system of unemployment reserves.
8) To secure the advantages of economic equilibrium it is particularly necessary to regulate large-scale corporations and such organizations as exert any degree of monopolistic control over prices. This regulation should be directed not only to the price-fixing policies of such organizations, but also to their methods of financing, accumulating, and investing reserves.
9) It is no less necessary to regulate all organizations which are concerned with the supply of capital and credit or with the business of investment. Investment houses and commercial banks should be entirely separated. The banking system should be unified and made subject to definite Federal supervision. Federal incorporation, involving member-

ship in the Federal Reserve System, should be obligatory on all banks of deposit.

10) Internationally, the primary requirements are the raising of world prices, the reduction of trade barriers, and the reconstruction of a world monetary system.

12) A National Social-Economic Council, of a purely advisory nature, should be set up and equipped with adequate facilities for research, for the purpose of continuous and concentrated investigation of the main problems of economic planning.

Of the eight special reports, Dr. A. H. Hansen's on "Flow of Purchasing Power" represents probably the most profound and concise discussion of the equilibrium between consumption, saving and investment.

ROBERT WEIDENHAMMER

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Financial Reports for Colleges and Universities. The National Committee on Standard Reports for Institutions of Higher Education. (Chicago: University of Chicago Press, 1935. Pp. iii, 285. $3.00.)

There has been so much looseness and inefficiency in the accounting of educational institutions that this volume is not only a timely one but a refreshing mode of attack on this very important subject. The work is the result not only of well organized and coördinated thought on the part of individuals but of a thorough collaboration of the principal University and College Business Officers' associations in cooperation with the General Education Board.

Although the book "does not attempt to give full instruction regarding accounting forms and procedures" the statements presented, and the classification of items thereon, should be sufficient to enable any competent accountant to devise appropriate accounting forms, books, and records. The statements are very complete and show clearly the relations between funds and the income and expenditure accounting, by funds. The statements show not only objects of expenditure but functional costs as well.

It must be borne in mind that educational institution accounting cannot be the same as commercial accounting, and that its expressions must be confined to the objects which are served by colleges and universities. Sometimes these objects permit a wider latitude of expression but just as frequently they circumscribe, or definitely limit, the activities of college financial administration and reporting. These conditions and limitations quite naturally prevent the recommendation of forms and accounting procedures for purposes of universal adoption. Each institution has certain peculiar problems and may, therefore, be impelled to use such forms, and records, which will best meet these problems. That is made plain in this work, but, let it be said that the general principles of report making, as described, are usable by all educational institutions, whether privately endowed or supported by public funds.

The book has a very valuable appendix (A), dealing with the "Computation of Unit Costs," which is deserving of earnest study from those interested in this phase of college administration. Various methods of cost accounting are discussed, with the wise warning that comparisons of costs between institutions (even though quite similarly circumstanced) may not be of great value and may lead to improper conclusions. The value of cost accounting is emphasized, however, for purposes of internal administration, which is concerned with such factors as: "size of enrolment, size of classes, number of faculty members, teaching loads, salary schedule of faculty members, curricular offerings, and efficiency of use of the facilities of the educational plant."

Your reviewer, although he sees some very decided advantages in the cost units, recommended for use, namely, "the full-time student equivalent and the student-credit hour," feels that these units point primarily to the factors which influence the consumption of educational services. Costing is essentially a problem of producing commodities, and services, and of distributing these. The way in which services offered are consumed is primarily the problem of the consumer. It would seem that the most logical *cost* unit for any course of study, or for any research project, is the hour of instruction delivered by the educational institution, with appropriate classification of units to express the varied character, quality, and objects of the instruction hour; the cost of an hour of instruction given to a class in elementary Ancient History could not, of course, be compared with the cost of an hour's instruction in the Ancient History seminar given to graduate students. The number of students enrolled in either group would not influence the cost, and should not, even though the number enrolling for either would, from a standpoint of administration, indicate the wisdom or folly of offering the courses. A cost unit predicated upon student hours, or number of students, would have administrative value but it would hardly be a genuine cost unit; it might, in fact, even create an administrative policy which would be damaging to those classes or groups which are small, but the work of which might have the very greatest educational significance—the most valuable educational work is not necessarily that which attracts the greatest number of students.

Again, if the hour of instruction were used as the costing unit, rather legitimate comparisons could be made between institutions offering the same or similar courses of instruction. These impressions are purely my own and, in no way, are they advanced as fault-finding; they do not detract from the usefulness of the cost units recommended for certain purposes of administrative guidance.

All in all, your reviewer believes that this publication is outstanding. Nothing as complete has appeared before. This book ought to be studied by every university executive and accountant, and by those public accountants whose privilege it is to audit the accounts of educational institutions, and who are interested in spreading the gospel of adequate, and satisfactory, financial reporting and statement making.

W. B. CASTENHOLZ

University of Illinois

German Monetary Theory, 1905–33. Howard S. Ellis. (Cambridge: Harvard University Press, 1934. Pp. xv, 462. $5.00.)

Dr. Ellis explains that "the purposes of his book are two: to make available in summary form the content of a large literature from which many students are debarred . . . and to present critical comparisons and appraisals of its outcome in the light of monetary science generally." He also explains that his examination has included the work of those important writers outside of Germany and Austria who belong to the German schools of thought. His treatment of his subject results in twenty-two chapters that form four separate parts. Theories are classified and it is made apparent that " . . . the lines of cleavage amongst theorists today are very old."

The analysis proper begins with Knapp's State Theory of Money since the appearance of that work in 1905 " . . . represents a mile-stone in the history of German monetary theory." Knapp believes that " . . . the state makes money valuable," but his is not a fiat theory of purchasing power. Rather it is concerned " . . . primarily with the forces which give 'valuableness' to money and cause it to circulate and with how this valuableness compares with ordinary commodity value." But, "Knapp's great mistakes were two: refusing to recognize that the state does not always create money, and secondly, misapprehending process by which validity is established." These are closely analyzed and the conclusion reached that Knapp's " . . . work is sterile." Other Chartal theories are briefly considered and the analysis then passes to the Nominalists.

"The most complete development of materialistic nominalism to be found in German monetary literature . . . ." is that of Prof. Ernst Wagemann. But Gustav Cassel's ideas also come in for consideration since certain features of his monetary doctrines " . . . characterize him unmistakably as a nominalist. . . . " Wicksell also, " . . . espouses the central doctrine of nominalism—its *contrasting* money with goods. . . . " As a whole the Nominalists have made contributions, according to Dr. Ellis. He then takes up "The Supply and Demand Theory" according to which "Money is ascribed value in its own right, absolute value; purchasing power is not the only legitimate significance of the term." But he finds three distinct shades of thought among the anti-nominalists. In this connection Helferich's views are carefully weighed and found wanting. "Supply and demand theories collapse through the imperfections of the demand concept alone . . . "; Otto Heyn and Josef Gruntzel are given passing consideration and then the conclusion is reached that (a) the value of money is not subject to the general law of supply and demand and (b) money does not, like goods, have an absolute value. " . . . common sense affirms that money of all things, is useful only because it purchases."

Ludwig Mises and Freidrich Weiser are weighed in the chapter, "The Marginal Utility Theory" and Dr. Ellis finds that " . . . the chief contemporary representatives of the school in Germany and Austria sooner or later forsake the cause; Schumpeter comes out definitely for nominalism, Mises resorts to historical regression, Wieser finally attenuates marginal utility to a shadow." It is the author's final opinion that "The marginalists have presented no evidence in the preceding chapter, that the 'distinction' between absolute and relative changes in the value of money does not exist." It then becomes possible to pass to the metallists and unless they are able to establish the case for commodity theories in general, "we shall have to accept the nominalists' dictum that 'the psychic relations of the economic man to money are significantly different from his relations to goods.'" Diehl, Hildebrand, Moll and Stephinger are sifted and found wanting. Likewise the "Socialist Doctrine" fails to meet the test. The section is completed with an able statement of "Conclusions as to the Nature of Money and Its Value." Here there is included a critical appraisal of B. M. Anderson's "Value of Money" with the conclusion that Anderson " . . . seems . . . to surrender Social Value as anything distinct from purchasing power." Still, Anderson's is the " . . . only outstanding American work upon the nature of monetary value. . . . " Dr. Ellis finds that " . . . the net outcome of this study of the nature of money is a vindication of nominalism. . . . Money has value in other senses than purchasing power . . . " and under certain conditions these interfere with a purely quantitative determination of purchasing power.

In taking up "The Quantity Theory," the author first weighs Schumpeter's Income Theory, then Cassel's "Analysis of Ceteris Paribus," Marschak's Treatment of Velocity, Wicksell's Interest-Differential Theory, Helferich's Unitary Demand for Money, Mises' Cash Balance Analysis, Hahn's Contrast Between Money and Credit and Neisser's Innovations in Velocity Theory. There follows a chapter on "The Opposition to the Quantity Theory" and then conclusions among which the incorporation of bank credit under velocity by Cassel, Helferich and Wicksell is found unsatisfactory. Moreover, the contention of Cassel and Wicksell that the quantity of money is dependent upon the price level does not count seriously against the quantity theory,—circuit velocity ". . . is an impure concept" and there is no basic incompatibility between the transaction and cash balance devices.

Part III, "Price Levels and Foreign Exchange Under Inflation," starts off with Inflation Theory, of which Cassel is the universally recognized leader. But Hahn, Mises, Eucken and Neisser are also brought into the analysis. This is one of the best chapters in the book, that portion relating to Eucken being particularly able. Eucken stands up under the searching analysis much better than Cassel, but the details cannot be considered here. "Balance of Payment Theories" are carefully weighed and then comes an exceptionally good statement of conclusions which is commended to all students of exchange rates under inflation.

Part IV treats on "Business Cycles." Here Wicksell's views are analyzed and also those of Cassel rather than Spiethoff's, since his views are not primarily within the realm of monetary theory. The basic issue raised by Wicksell—whether the natural rate of interest performs a useful function in the analysis of business

cycles—is answered in the affirmative, "If, 'Natural' is dispossessed of any reference to barter conditions. . ." Cassell, who regards himself as a Wicksellian, is found to have a theory that ". . . resembles Wicksell's quite remotely." The Schumpeter-Hahn type of theory is then taken up and particular attention is given to Hawtrey's criticism. "The Mises-Hayek Analysis of Cycles" is exceptionally vital, since Hayek completes the thought developed by Mises. Dr. Ellis analyzes the distinctive thesis upon which Hayek's entire work pivots—that a constant effective volume of money is the unique prerequisite of 'intertemporal equilibrium' —and concludes—"Despite the forcefulness of Hayek's case and despite certain undeniable contributions to the analysis of cycles, none of these ideas—from basic principles to the resulting policy—seems to me correct." The basis of this conclusion is fully developed and should be carefully studied by all monetary economists.

"Other Exponents of Credit Theories" receive a chapter and then the discussion passes to "Quality of Credit and the Business Cycle." The section on stock exchange credit is commended to American students because of its clearness and force. According to the final chapter, "Outcome of the Credit Theories of Cycles," ". . . the German approach to the problem of the business cycle has suffered from the unjustified exclusion of monetary elements." But the author rejects "The notion that business cycles are 'self-generative' . . ." because it does not explain why ". . . these disturbances do not in the course of time 'run down'." Moreover, he accepts the ". . . generalization that money does not operate to *induce* industrial variations except in conjunction with good and bad harvests, technological improvements . . ., waves of optimism and pessimism and the like; . . ." The theory that ". . . attributes the breakdown to an inevitable insufficiency of consumer income to purchase output when savings increase," cannot be supported. In addition, Robertson's differentiation of 'Long Lacking' and 'Short Lacking' is found confusing and Keynes' views on the relation of bank rate to the volume and velocity of money and credit and interest and prices comes in for penetrating discussion. For these and other reasons the final chapter is indispensable to the student of business cycle theory.

Dr. Ellis has written one of the best of the treatises in the Harvard Economic Series. His treatment indicates a profound grasp of recent German monetary literature, a balance of judgment, discriminating insight, and a highly developed deductive analytical ability. His thinking is very closely knit and at times extremely difficult to follow, since analysis can be successfully criticized only by those who are equally familiar with the writings which he examined so minutely and few there are who can meet this test. He is entitled to an expression of gratitude from all students of monetary economics for making the essence of German thought available and, most of all, for the enlightening criticism of many intricate problems. The latter feature alone should make his book invaluable as an economist's book for economists.

E. A. Kincaid

University of Virginia

Intermediate Accounting, Vol. II. Taylor and Miller. (New York: McGraw-Hill Book Company, Inc., 1934. Pp. x, 476. $3.50.)

This volume begins with a complete chapter on consignments. Entries for both consignor and consignee are made according to two methods, (1) sales of consigned merchandise entered in usual manner for all merchandise sold, and (2) making the entries for merchandise sold by consignees so that the net profit on each consignment can be determined. Instalment sales are explained under the three usual possible methods of taking up profits. The accounting procedure for unrealized profit, trade-ins, and repossessions is discussed and illustrated. A complete illustrative problem with solution, including financial statements, concludes the chapter on instalment sales. A rather long chapter deals with branch house accounting for both domestic and foreign branches. We find illustrations of entries on both home office and branch books, the closing entries for each, and the financial statements for both home office and branch and also consolidated statements. Space is given to the handling of unrealized profit in inventories and the handling of the exchange rates for the foreign branches.

The chapter on mergers contains, among other items, journal entries to record a merger, the working papers for balance sheet preparation after a merger, the effect of purchase price being different than the book value of net assets transferred into a merger, the allotment of stock when an increase in earnings is anticipated and the allotment of both stocks and bonds in certain cases. The next five chapters give a very excellent treatment of consolidated balance sheets and consolidated profit and loss statements. Some of the points which are discussed in these chapters are: a comparison of a merger and holding company, the treatment of goodwill and capital surplus, the preparation of consolidated balance sheets after the acquisition of a controlling interest in a subsidiary, the various kinds of inter-company transactions which cause receivables and inventories, the consolidated statements of three companies (a holding, sub-holding and subsidiary), the multi-company relationship, the problems because of no-par value stock, and mutual holding companies.

Receivership accounting includes definitions of insolvency, bankruptcy, receiver in bankruptcy, trustee in bankruptcy, and receiver in equity. There are fourteen pages devoted to a problem which fully illustrates the entries on the books of both the receiver and the corporation, the closing entries and statements prepared. The chapter covering the statement of affairs shows first the form and sections of the statement, then separate sections of the statement are illustrated and explained, and the last part of the chapter is the complete solution of a problem.

The statement of realization and liquidation with its ten sections is clearly explained and illustrated in Chapter XXVII. Two forms of the realization and liquidation statement are prepared. The liquidation of partnerships in instalments and accounting for estates and trusts are the two concluding chapters. The latter contains helpful illustrations of forms used in practice. The sequence of the chapters could not be improved.

At the end of each chapter we find questions and short problems. All of the longer problems for each chapter appear on pages 345 to 450 inclusive. An appendix of eight pages explains the fundamentals of Federal Income and Estate tax fundamentals. Both the practicing accountant and the student will find the text to be clearly presented and very helpful.

W. E. Karrenbrock

University of Illinois

The Investment Policy of Trust Institutions. N. Gilbert Riddle. (Chicago: Business Publications Co., 1934. Pp. x, 310. $4.00.)

The increase of personal trust assets administered by trust institutions from small beginnings in the early nineteenth century to the present estimated amount of about $31,000,000,000 is the subject of the opening chapter of Professor Riddle's survey. This is followed by a description of the typical machinery for handling trust investments as exemplified by the practise of the larger trust institutions, and a discussion of the development of commingled trust funds as an aid to administration. The next section deals with the legal control of trust investment by statutes and decisions in New York, Massachusetts, Illinois, Ohio and Missouri, the five states from which investments by trust institutions were chosen for analysis. The author has fallen here into some of the pitfalls which beset the layman who writes on legal subjects. Miscellaneous statutory provisions regulating investment of particular funds by savings banks and trust companies in Massachusetts are cited as pertaining to the general law of trust investment, over which actually Massachusetts exercises no statutory control. At other points, he has failed to draw distinctions which a lawyer would recognize as important.

The fourth section, containing an analysis of the investments of 196 testamentary trusts from nineteen trust institutions in New York, Boston, Chicago, Cleveland and St. Louis, is the vital part of the book. The analysis covers the period from 1919 through 1932. There is a study of the distribution of the investments in the trusts by type and field as received by the institutions and during the succeeding years when the latter were in control of the portfolios. An abundance of statistical data presents the facts from different points of view, and the supporting text directs attention to the more important trends revealed by the tables and charts. The funds are further analyzed as to number of items per fund, average size of items, the investment of funds received wholly in cash, and from other angles. The quality of the investments contained in the portfolios in 1932, the income record and the success achieved by the institutions in maintaining or increasing principal are all subjected to examination. The author has concentrated on presenting the detailed data, rather than on drawing conclusions. The latter task is complicated for the reader by difficulty in distinguishing changes in distribution caused by purchases or sales from those which were the result of market fluctuations. The income return figures, based on book values, incompletely reveal the accomplishment of the trust institutions. At other points it would have been useful to know to what extent freedom from legal restrictions was granted by the trust instruments.

The concluding section touches on the suitability of investments in various fields for trust purposes, and discusses the impact of the business cycle on trust investment and the need for freeing trustees from restrictions which hamper intelligent adaptation of the portfolios to changing needs.

"The Investment Policy of Trust Institutions" should be of interest to students of investment matters as a valuable pioneering step into an important area which has been largely neglected in the literature of the subject. A considerable body of data has been collected with painstaking industry, and if the task of correlation is not complete, it is because of the many phases of the investigation undertaken, and the lack of predecessors in the field on whose foundations the author might have built.

R. B. Gowing

Harvard Graduate School of Business Administration

The Law in Business Problems, Revised. Nathan Isaacs. (New York: The Macmillan Company, 1934. Pp. xxviii, 512. $4.00.)

An ever present danger in courses and books on business law is presented in the demands for simplification. The student yearns for the certainty of a rule and the books give him one in plain straightforward language. Yet doubt may often be expressed whether he has acquired anything from the process but a comfortable sense of knowledge, which may prove to be a complete and costly delusion. If ever it is true that "a little learning is a dangerous thing" it is true in the law, provided that the possessor of the learning is not keenly aware of his limitations. In that case, though he has little learning, he has much wisdom.

The art of a teacher or writer on business law must guard him against the serious pitfalls thus surrounding his path. That Professor Isaacs has been careful in this regard is apparent. That he has not succeeded in escaping the danger is equally clear. The limits of a review prevent the multiplication of illustrations. One may be taken here. At page 31, the author throws in parenthetically the statement "it has been estimated that nine-tenths of the volume of commerce in the United States is interstate commerce." This observation appears without comment or criticism. There is no explanation of what is "commerce" or what is "interstate commerce." Terms which have been the source of endless dispute are handled as if they had content so perfectly clear that even to the novice no explanation is necessary. Whether the author is referring to subjects upon which Congress can act under the Commerce Clause of the Federal Constitution or subjects with reference to which state action is checked by that Clause the reviewer has no way of knowing. Perhaps he is viewing "interstate commerce" simply as a matter of fact. It is apparent that there are many varying circumstances which determine the use of these terms in Courts of Law. So numerous and so different are these

circumstances that it is startling to find unexplained the suggestion that the volume of interstate and intrastate commerce can be reduced to a mathematical ratio of general validity.

Oversimplification is the occupational disease of writers on business law. In their turn they may insist that lawyers are subject to a serious ailment in the multiplication of nice distinctions and in the exaltation of the uncertainties of the law. Perhaps a happy mean may be reached.

Apart from this criticism, the volume under review has much to commend it. The organization is excellent. The author has wisely excluded some topics often found in works on the subject so that more intensive consideration may be given to the matter present. This is most desirable. Doubtless a better appreciation of the law is conveyed to the student of business by a careful study of a limited area than by the attempt to tell all the law which it might be useful to know. The latter system must often result in a hodgepodge of confused ideas and a lack of any real understanding of the place of law in the business world.

The organization differs somewhat from that of the first edition. The first chapter dealing with the nature of business law and its historical background is particularly useful. The reviewer regrets that the material in this chapter was not more fully developed. Remaining chapters deal with the fundamentals of contracts, procedure, devices for the use and protection of credit, negotiable instruments, and business organizations. In accord with the trend of the times more emphasis is placed on government control of and coöperation with business than was had in the former edition. The text material contains some excerpts from other authors. In addition there are many cases, the opinions in which have in most instances been drastically but carefully cut. A substantial use is made of footnotes.

This volume may be read with profit by lawyers for the picture it presents of the interaction of business and law. For the course in business law it will be stimulating, but the instructor must assume the responsibility of a careful explanation of some of the seemingly complete statements loosely made in the text.[1]

F. D. G. Ribble

University of Virginia

Legal Reserves in American Banking. Robert G. Rodkey. (Ann Arbor: University of Michigan Bureau of Business Research, 1934. Pp. 121. $1.00.)

[1] For example, the following appears on page 54: "To the general rule resisting classification of businesses there was one exception that came down from early times and that was destined to develop vigorously in our own day, namely, that certain types of business charged with a public interest were subject to state regulation." From this sentence is not the student justified in inferring that many types of business not "charged with a public interest" are exempt from state regulation? Yet the butcher, the baker, and the candlestick maker are all subject to some state regulation. The author's meaning is clear enough to those familiar with discussions of businesses affected with a public interest. But he is not writing primarily for that class.

A key question in the complicated banking problems now confronting the country is ably treated in Professor R. E. Rodkey's work.[1] It is a peculiarly American question since, in the banking systems of European countries, reserves aside from those of the central banking institutions are not required by law. In the United States, prescription of reserves by law was the outgrowth of experience with the bank notes issued before the Civil War; and prescription of reserves against deposits was a latter development toward the safeguarding of bank creditors. At present the advisability of distinguishing between time and demand deposits and reserve requirements against them, as called for by the Federal Reserve Act, have been seriously questioned. Clearly a more satisfactory solution than the present arrangement must be found in the new banking legislation now before Congress.

In singling out from the tangled skein of banking problems this one thread—banking reserves—and unravelling it carefully, the author has done well a job which needed doing. A rapid survey of both state and national attempts to secure proper banking reserves is followed by an appraisal of present conditions with definite proposals for the future which clarify and emphasize the author's conclusions. His plan is in strong contrast with the complicated measures which have been proposed to meet a situation requiring, above all, a simple, direct, and easily understood solution. Professor Rodkey's plan is based on the following ideas: (1) He would eliminate the illogical classification of banks now existing. (2) He would substitute in place of this a plan for reserves based upon the relative need for reserves by individual banks against different classes of deposits. Some are much more evanescent or volatile than others. Therefore against the more volatile deposits he would require a bank to carry larger reserves. Specifically, he recommends a basic reserve of 12% against gross bankers' balances and 6% against all other classes of deposits, their percentage to apply irrespective of the location of banks. (3) In order to avoid an artificial classification of deposits, he suggests requiring the same reserves for time deposits as for individual demand deposits.

Professor Rodkey deserves commendation for focussing attention again on the varying character of bank deposits and their relation to reserves. This is education in the obvious, but it is far more important to all concerned than a learned discussion on some abstract or involved point in banking. Although the reviewer would hesitate to support the thesis as laid down by Professor Rodkey *in toto*, he does not hesitate to applaud vigorously his attempt to write more than an historical criticism of banking reserves and to enter the "no man's land" of proposals. This is a function of a constructive thinker.

This review is merely a brief sketch of a carefully worked out document which might well be read by banker, student, and teacher of banking subjects. It is

[1] Rodkey, Robert G., "Legal Reserves in American Banking," *Michigan Business Studies*, Vol. vi, No. 5.

a well arranged document and therefore convenient to have available for reference on an important subject.

JOHN C. BAKER

Harvard Graduate School of Business Administration

Principles of Foreign Trade, Revised. C. E. Griffin. (New York: The Macmillan Company, 1934. Pp. xii, 476. $3.00.)

In the preface to this new edition the author proposes as his main purpose "to give a broad economic basis for those students who are now pursuing the academic part of their training for business." The further aim "to bring the teachings of accepted economic theory into the realm of business and governmental policy" is stated. The reader is thus forewarned that the author makes no attempt to develop further the intricate theories of international trade. In fact, he states that "radical revision of the first three chapters, dealing with the basic theory of international commerce, has not been deemed necessary."

Comparing the revised edition with the first edition, it may be said that the chapters on foreign exchange and the balance of trade have been rewritten to account for recent developments. Foreign trade trends have been brought down through the year 1930, and new chapters have been added on the relation of government to trade.

Although the author has not divided his book into main segments, in reality the material presented may be broken down into three parts: (1) International trade theory; (2) international marketing and trade practices; and (3) international commercial policy.

The section on theory is restricted to a statement of classical fundamentals, with little criticism of this position and with no attempt to introduce the more intricate aspects of international trade theory as recently developed. After stating the law of comparative advantage, Professor Griffen links this principle to some common popular misunderstandings among business men concerning the effect of "competition from pauper labor," the disposal of our "surplus" products, etc. In so doing, he adheres closely to his stated objectives.

Somewhat more than a third of the book is devoted to foreign trade marketing and financing. The functions of marketing are analyzed. The customary classification of export and import agencies and institutions is given. There are included three chapters in "principles" of ocean transportation. The methods of financing foreign trade are described in two chapters. There is a chapter devoted to risk and risk bearing. The relation between foreign investments and trade is also noted in this section. Throughout his entire discussion of foreign trade practices, Professor Griffen deals with "principles," with relatively few examples or cases for purposes of illustration.

The last hundred pages of the book deal with governmental policies relating to foreign trade. A modest discussion of the advantages and disadvantages of the tariff is given. An overly brief account of the probable incidence of the tariff is included—such would be the student's opinion. The remainder of the book is devoted to a historical discussion of the tariff in leading countries with an analysis of the problems involved in putting the tariff into effect.

Professor Griffen cannot be criticized for departing from his stated objectives. Throughout the book he has propounded economic principles, not for the purpose of developing pure theory, but as bases for analyzing the problems arising out of international trade for the business student. The book, therefore, is adaptable for use in Colleges of Commerce where the aim is to introduce the commerce students to the essentials of international economics. With proper amplification by the instructor in charge, the book would give this class of students, hoping to enter domestic business upon graduation, a sufficiently adequate understanding of the subject so that they would not be misled by popular arguments and misconceptions. On the other hand, where a thorough and detailed knowledge in both theory and international commercial practices is contemplated, this book will probably prove inadequate for class use. For the student of theory, Taussig and Ohlin and others would be more suitable for reading matter. For the student of international commerce, there are other books which would offer more adequate treatment.

J. C. NELSON

University of Virginia

Trading on the Equity by Industrial Companies. Charles L. Jamison. (Ann Arbor: University of Michigan, Bureau of Business Research, 1934. Pp. 50. $1.00.)

In this interesting study of the borrowing policies of 52 corporations chosen at random, Professor Jamison attempts to weigh the factors which influence corporate borrowing and to determine the results of borrowing operations. The study covers the years 1920 to 1932 inclusive, thus limiting itself to the post-war period, including 6 years of depression, 5 years of "normal" business and 2 years of "inflation."

The 52 companies were divided into 3 groups representing three different borrowing policies. It was found that six companies (12 per cent) had no significant debt at any time during the 13 year period. (Debt being defined as funded debt and bills payable, but not accounts payable.) Twenty-eight companies (54 per cent) were constant borrowers, that is, were in debt at the end of each year, and eighteen (34 per cent) were intermittent borrowers. Over the 13 year period, 71 per cent of the companies, on the average, used borrowed money. These companies represented 81 per cent of the invested capital of all companies studied. Great variation from company to company in the proportion of borrowed capital to total tangible assets was found, with no seeming tendency to concentrate around an average. The average borrowing over the period was relatively small, being 19.39 per cent of total tangible assets for the constant borrowers. In no year did average borrowings exceed 25 per cent of tangible assets, although one company reported its borrowings equal to 77.6% of tangible assets in 1930.

The analysis of the results of borrowing during the different phases of the business cycle follows the analysis of results for the period as a whole. It was found that borrowing seems to follow no logical cyclical pattern. The percentage of loans to tangible assets decreased in the depression year 1921, but increased in the depression years 1930, 1931, 1932. On the other hand in the inflation years 1928 and 1929, when, as demonstrated by the study, trading on the equity actually was profitable, there was a decrease in the ratio of loans to tangible assets for borrowing companies. From this it is concluded: "This is a manifestation of the general tendency of corporations to follow no rational policy in the matter of trading on the equity. Seemingly, financial policies are motivated by other influences" (page 2).

Perhaps the most striking finding of the study was that relating to the profitability of borrowing. While there was wide variation between the companies studied it was found that earnings on both total tangible assets and stockholders equity varied inversely with persistency of borrowing. The non-borrowing corporations averaged the highest rate of return on total assets (14.9%) over the 13 year period. The intermittent borrowers averaged 8.04% and the constant borrowers only 5.46 per cent on total assets and 6.77 per cent on stockholders equity. In only 6 out of 13 years did the constant borrowers, as a group, earn the more than 6% return on tangible assets that is considered necessary to make borrowing profitable.

The author carefully avoids the erroneous inference that companies earned more on total tangible assets *because* they did not trade on the equity. He rather concludes that for the period as a whole the group that borrowed did not find it profitable, since the average return on all tangible capital was only 5.58 per cent, which would hardly permit profitable borrowing if a rate of 6 per cent is assumed to be paid for borrowed funds.

Seemingly, then, those corporations which earned enough on invested capital to make borrowing profitable did not borrow, while that group which, on the average, earned a return below what they might have to pay for borrowed funds did borrow! Professor Jamison concludes that those corporations which could borrow profitably did not do so because they did not have to. They could finance their requirements by the reinvestment of earnings or by the sale of stock—in other words, necessity may be a more potent motive for borrowing than the pursuit of profit by the stockholder. Borrowing may be the result of low earning power rather than the cause of high earnings on the stockholder's equity. This, says the author, is demonstrated in case studies of five corporations which make up the last chapter in the monograph. The five cases demonstrate clearly the disadvantage of trading on the equity during all or a large part of the period under consideration.

Several questions may be asked, regarding both method and conclusions. First, the exclusion of accounts payable from borrowed funds would hardly seem logical but may have been practically necessary. Certainly such represent a form of borrowed capital, and the point that these accounts are more than offset by accounts receivable seems to the present writer to be irrelevant. Why should notes payable not have been excluded likewise on the ground that many corporations have large offsetting notes receivable accounts? Moreover, a corporation that obtains a large part of its capital from merchandise creditors has less need to borrow in other ways and has less excuse for issuing bonds or notes and increasing the proportion of its indebtedness to stock equity. Might not some corporations have been shifted from the borrowing to the non-borrowing class as the result of this distinction? Second, would it not have been desirable to include preferred and other limited-dividend stock under borrowings rather than equities for this purpose? The legal difference is obvious, but do not managements, which presumably represent common stockholders, attempt to trade on the equity by issuing limited-dividend stock as well as by issuing bonds? To be sure, preferred stocks do not carry with them the danger of receivership if dividends are passed, but are they not issued for much the same reasons as bonds are issued, i.e., to obtain capital at a rate lower than it will earn, or because common stock is in some cases not salable?

Third, is it correct to assume that many corporate managements lacked rationality because they borrowed when, as a group, they have earned less than the assumed 6 per cent charge for borrowed capital? Unless corporate managements expect six years of depression out of thirteen, they might have been quite rational in increasing indebtedness when they did. A test of the reasonableness of borrowing would seem to have to go back to the period in which indebtedness was incurred. It can hardly be assumed that all corporations could have paid off all their debt by selling stock even in 1928 and 1929. To a certain extent, at least, corporations found themselves with a debt that had been incurred in previous days when conditions in the industry were more favorable. In the "normal" or inflation years (1923 to 1929) trading on the equity was profitable. If funds could have been borrowed at an average rate below 4.97% borrowing would have been profitable in the period 1920–22. A rate as low as 2.33% would have been necessary in 1930–32.

However, all students of financial policy will welcome this study. It pictures clearly what results were achieved by trading on the equity during a period of thirteen years. While conclusions drawn from this picture may vary, it demonstrates that the practice of raising funds by borrowing may have an unprofitable and even dangerous as well as profitable outcome. It also gives us some much-needed factual material concerning industrial corporate financial policy.

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World Economic Survey, 1933–34 League of Nations, Geneva. (Boston: World Peace Foundation, 1934. Pp. 365. $1.50.)

"World Economic Survey—1933–34" marks the third in the series published by the League of Nations under this title. The volume is a tribute to the labors

of Mr. J. B. Condliffe who has succeeded in presenting a comprehensive appraisal of international economic conditions in a series of ten chapters. Discussing "The Merchant and his Profit," Mr. Condliffe points to the evidence "... that short-run forces of the business cycle were making for recovery," in the spring of 1934. But, in Japan and elsewhere recovery waited on the outcome of the experiments in the United States, for these constituted one of the great uncertainties throughout the period under consideration. Accordingly, it ended with a renewal of international strain evidenced by a drain of gold to the United States, renewed weakness of German blocked marks, and efforts at budgetary and general economic deflation in France.

Chapter II, "The Changing Economic Order," brings out changes in the rate of population growth, shifts in consumption, absence of freely competitive markets resulting from "... the maintenance of prices of producers' goods ..." and the "... revolt against the related systems of democracy, laissez-faire and internationalism." Indeed, "The economic world, which seems to be emerging from the lowest depths of the long depression, has gone far towards changing the basis of its organization from international to national ...." Consequently, what with the unevenness of distribution of natural resources, the limits of national self-sufficiency are likely to cause a definite lowering of standards of living. The fruits of such efforts at recovery are found, for example, in the fact that "... some governments subsidise their farmers to grow wheat at three times the price at which it might be secured from other countries whose governments are paying their farmers to refrain from production."

As for evidence of recovery and the extent thereof there is submitted a valuable appraisal, supplemented with statistical data, that would be encouraging were it not for the artificial character of the gains. Data of "The Production of Investment Goods and Unemployment" show increases in the former and decreases in the latter for seven important countries for 1934 (first half) as compared with 1932, but the figures are not so encouraging when considered in connection with the able discussions of the several types of restraints upon production practiced in some of these same countries. Moreover, evidence is also submitted that "... standards of labour legislation have, on the whole, survived the impact of the severest depression ever known."

In the chapter, "World Trade in 1933" the author discusses the "... recent development and present position of trade restrictions," and the meager accomplishment in overcoming these. Here also he sets forth the "... elements of the shipping crisis. ..." "Some Problems of Public Finance" follows in logical order and attention is called to "... the increasing reliance upon turnover and consumption taxes," accompanying the fall in Customs receipts. In discussing "Credit and Recovery" the author finds "Three major processes ... working towards re-organization and ... a strengthening of the credit systems," namely, the reorganization of banks themselves, industrial liquidation and currency depreciation. These with other forces have achieved "... a sounder and more liquid banking condition in several countries ... perhaps the greatest progress during 1933 towards general business recovery." Even so the tendency to further currency depreciation exposed the gold *bloc* to the danger of losing gold from their reserves if and when stabilization was adopted. Unfortunately, it was not adopted; quite the contrary. Following devaluation of the dollar the United States gained $400 millions of gold in February alone while European Central banks lost $368 millions.

As for "The Capital Market," in "... former depressions, the final stages of capital reconstruction were often forced by the appearance of new enterprises capitalized on a lower cost basis. Such a tendency is now slower in developing and it is therefore more important than ever to revise past commitments and place business enterprise once more on a profit-earning position." However, "... some progress has been made in the liquidation of industrial indebtedness." "The low short-term interest rates ruling in many countries have enabled business enterprises to lower their fixed charges ...," conversions on a large scale have reduced public expenditures, there should be a tendency for long-term interest rates to follow the downward trend of short-term rates, the depreciation of sterling and the dollar lightened the burden of external debts of debtor countries, and external short-term debts have been materially reduced. These are favorable factors, but the volume of international trade has declined seriously. High prices and costs have weakened the competitive position of important countries and their reduction has proved difficult. "The choice between adjustment by means of price changes and adjustments by means of exchange depreciation or devaluation involves both national and international problems." That remained to be solved in July, 1934, when the author closed his work. Moreover, the outcome of the Recovery Program in the United States is in itself a disturbing factor "... of great weight."

Dr. Condliffe treats the difficult problems involved in his task with great skill and he presents the results of his labor clearly and interestingly. This volume, with its predecessors, constitutes the only source material on international economic problems available to many American students and it is particularly valuable since it treats the economic problems of the world as an interrelated whole, just as they should be treated. It is to be hoped that the volumes will continue to appear from year to year. The value of the work would be enhanced if the treatment of various national policies were examined more critically, but that can hardly be expected in a volume coming from such a source.

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